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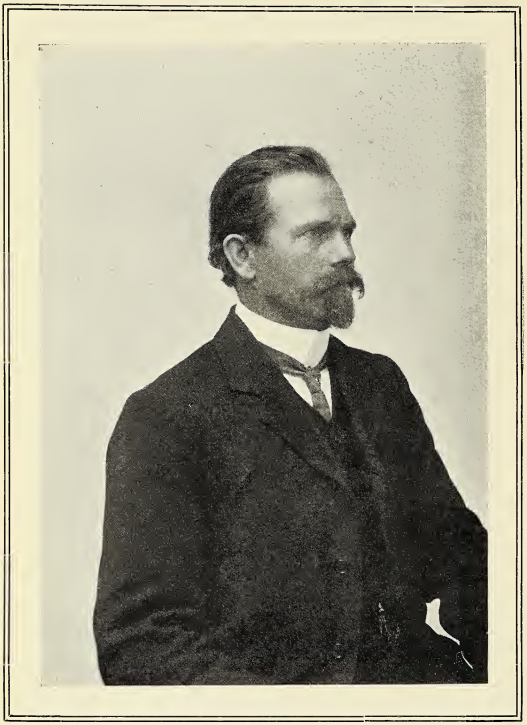
MY JOURNEY FROM RHODESIA TO EGYPT



THEO KASSNER, F.R.G.S.

Frontispiece

MY JOURNEY FROM RHODESIA TO EGYPT

INCLUDING AN ASCENT OF RUWENZORI AND A SHORT ACCOUNT OF THE ROUTE FROM CAPE TOWN TO BROKEN HILL AND LADO TO ALEXANDRIA

BY

THEO KASSNER, F.R.G.S.

AUTHOR OF "GOLD SEEKING IN SOUTH AFRICA"
GEOLOGICAL SKETCH MAP OF THE DE KAAP GOLD FIELDS
GEOLOGICAL SURVEY MAP OF THE SOUTHERN TRANSVAAL

WITH 107 ILLUSTRATIONS FROM PHOTOGRAPHS AND THREE MAPS

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PREFACE

FOR some years I had harboured the ambition to penetrate the remoter parts of Central Africa. I recognised that the possibility of breaking new ground would not be open to me or to anyone else very long. When civilisation has taken a firm hold on a vast territory as it has of Africa, it spreads its agencies and influences over the whole area at a rapid and constantly accelerating rate of progress. I recognised that within thirty years Africa will be an open book, with every part as convenient of access as any part of the United States. The rôle of the explorer is one that will be impossible to fill when the railway has spread its network of tracks through the dense forests of the Congo and along the high plains of the African uplands. This ambition of mine was nursed for many years, but the opportunity to realise it had never come. About two years ago the knocking of my desire was, if possible, more insistent than ever, and opportunity seemed to have left the door ajar. So I began to make my preparations. It was my intention to traverse the highlands of the Dark Continent, not to explore the coast-lands, that are much more easy of access.

Preface

The first object of my travels was to ascertain what parts of the interior are suitable for white settlement, and calculated by climate and natural resources to furnish a livelihood for the pioneer who is prepared to take his fortune in both hands and hazard it upon the issue of his own hard work in a new land.

In the remote parts which I proposed to visit, it was more than possible that I should discover unknown natural products, and my second object was to seek these and to collect specimens of geological, botanical, and zoological interest.

The sporting side of my expedition was entirely subordinate. I shot only for the pot and to save and protect human life. The reader who looks for sporting adventures in the pages that follow will be disappointed.

I travelled north through Southern Rhodesia, cut a path through Northern Rhodesia and the eastern part of the Congo territory, visiting Tanganyika and German East Africa, and reaching civilisation again by way of the Nile. The length of my entire march was 8000 miles and the time occupied was eighteen months. The journey might be described as one from Cape Town to Cairo.

I recognise that I can say little that is new regarding British South Africa, and Egypt has been the inspiring subject of abler pens than I can wield. Therefore the record of my expedition is practically confined to what I saw and heard in the Congo Free

State. An intimate acquaintance with South Africa, especially the Transvaal, enabled me to estimate the potentialities of the Congo territory in the light of comparison with the more southerly parts of the African continent.

In view of the agitation that has been directed against the administration of the Congo Free State and the atrocities charged against the guardians of civilisation in that little-known country, I paid particular attention to the relations of the administrators with the native races in the country through which I passed. It must be recognised that a traveller through any land can obtain only a limited amount of information. The most that he can do is to exercise his powers of investigation, and then, as a faithful scribe, transmit to paper the facts that have come within the purview of his observation. This much I claim to have done, and the results are recorded in the body of this book. It may be in order to state here that they exonerate from culpable inhumanity the band of officials to whom the Government of the Congo entrust executive administration, and acquit the Government itself of any systematised policy of cruelty towards the black races within the administered territory.

The development of new but habitable regions should be far more earnestly considered by the people of the overcrowded cities of Europe. Vast tracts of

land are lying idle, where multitudes of poor people could make prosperous livelihoods, and lead more independent lives under properly organised national systems of emigration.

To that department of social economy this book is a contribution.

The entire expense of my journey came out of my own pocket, and I was indebted to no person or corporation for any financial assistance whatever. I make this statement that I may discount in advance any criticism to the effect that I was influenced by any ulterior consideration in recording facts or expressing opinions.

I thank heartily all those who were kind and helpful to me, especially His Excellency Lord Selborne, the late Governor of the Transvaal, who furnished me with useful letters of recommendation to the various British administrators on my route, to Monsieur P. Forthomme, the Belgian Consul at Johannesburg, who gave me a general letter of introduction to the functionaries in the Congo State, and to the German Consul at Johannesburg, who handed me a formal note to the officials in German East Africa.

THEO KASSNER

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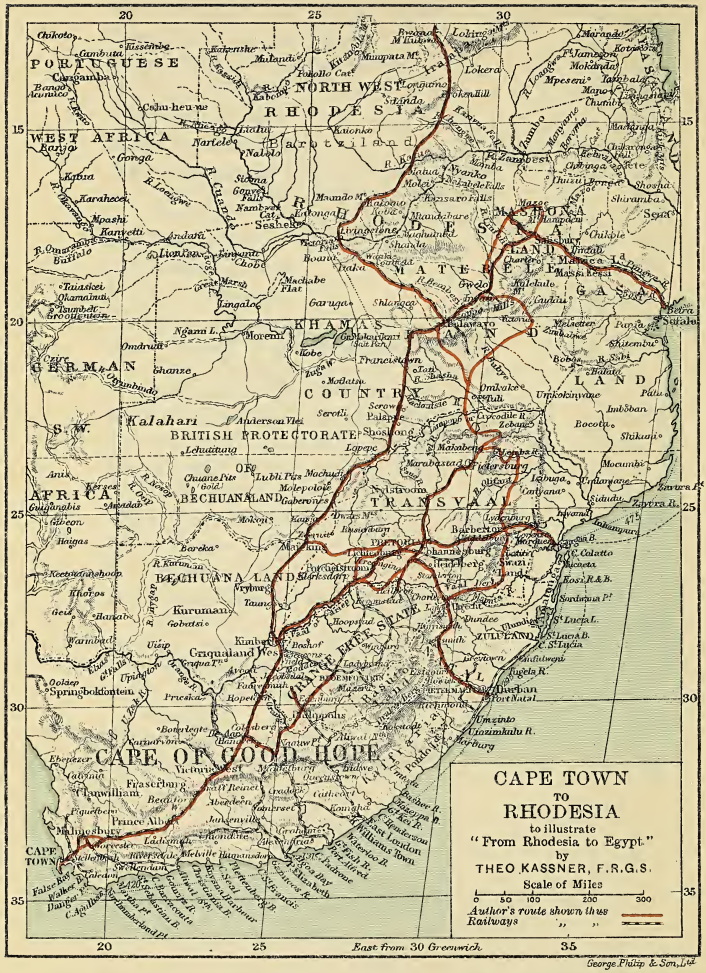

NOTE.—The author's route described in this volume is that from Cape Town to Broken Hill, the other red lines indicate routes of previous journeys.

MY JOURNEY FROM RHODESIA TO EGYPT

I

SOUTHAMPTON TO BROKEN HILL

VIA CAPE TOWN AND JOHANNESBURG

I SAILED from Southampton and touched South Africa at the usual point—Cape Town—on an August morning. The magnificent prospect from the roadstead is typical of South African scenery to an appreciable extent. The huge mass of Table Mountain with its flat summit over two miles in length forms the background of the picture. It resembles hundreds of South African mountains in that its top looks as if it had been planed level by a giant hand. It almost seems to be pushing Cape Town into the sea from the narrow shelf upon which the city has found a lodgment.

The sight of its familiar but always fascinating grandeur threw upon the screen of my memory many recollections of former journeys and explorations in the continent of which it is the southern sentinel.

Having gone through the usual procedure of disembarking and conveying my baggage up to Cape Town, I made the ascent of the mountain, which is approached by an easy winding path leading past a lower great-topped mass called Kasteel Berg. Every step of the way discloses fresh beauties. There is strong temptation to linger and thereby become entrapped by the darkness that is divided from broad daylight by almost no twilight. As the Lion's Head comes within the climber's zone of vision, he sees wide patches of the beautiful silver trees whose foliage justifies the name, and gives to the vegetation an aspect quite unknown in our northern latitudes.

Ascending the path along the slopes, he notices groups of Protea, or Zuikerbosch, and other shrubs rising from a luxuriant carpet of heath, grass, and flowers of bright and varied hues. As he nears the summit of the mighty mountain he climbs over rocks and boulders, along clefts and steep precipices clothed with a dark green foliage, and finally the top is reached, a large plain of wet black soil, covered with short vegetation. Clusters of the beautiful scarlet orchid called the Pride of Table Mountain (*Disa grandiflora*) grow along dangerous precipices in the ravines.

An invigorating breeze blows, and from the crest a magnificent panorama feasts the eye and is ample reward for the toil of the ascent. Cape Town nestles

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immediately below, framed in the dark green foliage of the great pine plantations, and to the right stretches the fertile coast valleys with patches of cultivated lands. High precipices, beautiful glens and valleys combine to make a picture of superb grandeur.

The plateau itself is full of interest, but in drinking in the natural beauties the traveller must not forget the time for descending, because in the late afternoon, or when the great masses of clouds envelop the summit and slopes, it is easy to lose the path in the heavy mists.

A descent that sustains the scenic charm follows the winding road along the northern slopes towards Constantia, past many silver streams of rushing water. Here are famous vineyards where the best wine of the Colony is produced, and extensive orchards of oranges, lemons, apricots, and peaches. Some three or four miles from here is the principal model forest plantation of Tokai, a valuable institution of great practical benefit. A good road through the lovely districts of Wynberg and Claremont leads back again to Cape Town. All around the town on its landward side are great forests of pine trees, fine avenues of oaks, lovely gardens and orchards, all testifying to the fertility and possibilities of the land and to the toil of the settlers.

The Cape Flats towards the sea were formerly sandy plains overgrown with heather. This land

was given to immigrants in the earlier days by the British Government. The recipients have improved their lots by well-directed industry, and to-day extensive and fertile vegetable gardens cover the area of a former waste. This is a striking example of what can be done with undeveloped land, and this example might be followed with advantage in countries other than South Africa.

From here I visited Muizenberg, a summer watering-place, and Simonstown with its extensive dockyards, both situated on the shores of a sheltered inlet called False Bay.

From Cape Town my route lay by the railway to Kimberley, and thence by Bulawayo and the Victoria Falls. During the railway ride the observing traveller may see and appreciate the terraced formation that divides South Africa into zones with distinct and individual characteristics. But apart from the clearly defined plateaux of different altitudes the country and scenery are interesting and sometimes beautiful. A few miles from Cape Town the track leads through the fertile valley of Stellenbosch, 366 feet above sea-level. This is the oldest settlement in South Africa, and was laid out by Commandant van der Stel in 1681. Fine avenues of oak trees, planted by its founder over 200 years ago, line the streets, rendering them cool and shady even in the hottest days.

The valleys contain numerous vineyards and

Photo by T. D. Ravenscroft, Cape Town

RHODES MEMORIAL, CAPE TOWN

Photo by "African World"

TRANSIT BY RAILWAY AND COACH

orchards. Away to the east we see the Hottentot and Drakenstein Mountains.

After leaving this quiet and restful town we traverse the beautiful Paarl district, 405 feet above the sea and thirty-six miles distant from Cape Town. We are in the fruit-bearing region of Cape Colony. Orchards and vineyards abound, and some of the best wine of South Africa is produced here.

To the west rise the Paarl Mountains, upon which rest three huge granite boulders, named respectively the Paarl (Dutch for Pearl), Britannia, and Gordon Rock, the first giving the name to the district.

On the east we still see the rugged peaks of the Drakenstein Mountains.

The train travels along the coast plateau through ever varying and beautiful scenery up to Piquetsberg Road Station, where the line turns to the east and ascends towards Tulbagh in a series of steep gradients, through a narrow valley which soon opens out to a broad and fertile stretch of country, where wine and grain are produced in generous measure. As seen from the escarpment of the Drakenstein the country gives evidence of successful husbandry. Below the green and rounded slopes at the base of the mountain lies the fertile valley of the Paarl with the winding Berg River, and beyond are the great grain-producing plains of the Koeberg, bounded by the expanse of ocean.

The numerous homesteads dotted about belong mostly to the descendants of the Huguenot settlers who first broke African sod here. Hence the pioneer movement extended northwards into the then wild and dangerous territories whither we are now speeding.

Rising gradually over wild and rocky mountains, we cross the Breede River and come to Ceres (1493 feet high), where again the fine old oak avenues attract attention. Above the Drakenstein Mountains we enter the plateau known as the Southern Karroo, an elevated plain varying from 600 to 2000 feet in height and reaching to the Zwartbergen Mountains, whose peaks range from 5000 to 7000 feet in height. We are gradually attaining higher altitudes.

A great change in scenery and vegetation takes place. The former fresh, bright green foliage merges into a scrubby, dull green growth peculiar to these high plains, and bare uninteresting veldt broken by barren and rocky heights. The rivers cut their ways in deep gorges, far below the general level of the surface.

From Worcester the train enters the Hex River Valley, and after a very steep climb up the face of the Hex River Mountains emerges upon the higher plain of the Central Karroo. The scenery on the left during the ascent is ever memorable. Varied and extensive views of the flat-topped and barren hills are seen through the clefts of the mountain,

while a sharp contrast is afforded by the occasional glimpse of wheat and tree vegetation, of orchards and quince hedges, and the homesteads of the sheep-farmers.

This vast plain stretches east and west for about 350 miles at a height of from 2000 to 3000 feet above sea-level. Ranges of low ironstone hills or kopjes relieve the desolation of the country, and the only vegetation is a stunted shrub called the Karroo Bush, which, however, gives nourishment to large herds of sheep and goats. Water is very scarce in these parts, but wherever the problems of irrigation have been mastered the soil has proved extremely fertile. After the spring rains and before the high summer heats the barren ground is covered with flowers of great variety and beauty. The rain-fall is small, averaging only from ten to eighteen inches annually; but the climate is healthy, and the winters are dry and sunny, with frosts at night.

From this plain a great chain of mountains rises again, the highest peak reaching to 7800 feet above sea, and forms the wall of the third terrace known as the Northern Karroo. The elevation of this plateau averages from 2800 to 6000 feet above sea-level. We have now reached the general elevation of the centre of Africa.

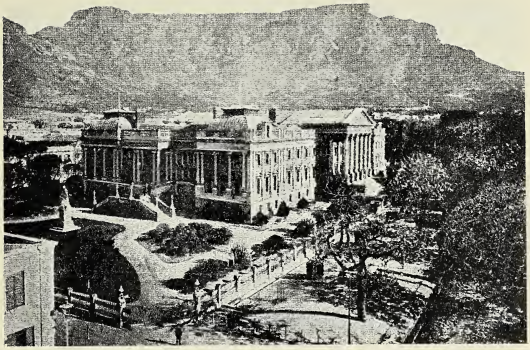
As we proceed farther inland the karroo bush confines itself to smaller patches and gives place to

stretches of coarse grass. The scenery carries the same monotony and desolation as that of the Central Karroo. The climate is dry and bracing, the rainfall averaging as low as two inches in some parts, although the general average is about ten inches.

Proceeding along this vast *veldt*, a Dutch word applied to all the plains, past Victoria West (4175 feet), De Aar (4180 feet), where the line from Port Elizabeth is met, across the Orange River (3540 feet), Modder River, and Beaconsfield, we ultimately arrive at Kimberley, of diamond fame. We cannot pass Kimberley without some note of its wealth and history.

When diamonds were first discovered in 1870, a great rush immediately followed. In a very short time a large mining camp sprang up. The diamonds were first found in the sand on both banks of the Vaal River, but later on mines were discovered near by, at Du Toits Pan and Bulfontein, and on the farm Voruitzicht, which later became known as the De Beers and Kimberley mines. On account of unjust taxation, much discontent developed among the diggers.

In 1875 the miners rose in rebellion and hoisted the black flag, and in the following year this diamond locality was proclaimed British territory. The claim of the Orange Free State to Kimberley was settled by a payment of £90,000.



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CAPE TOWN: THE PARLIAMENT HOUSE AND TABLE MOUNTAIN

TRANSPORT BY OX-WAGGON ACROSS THE KARROO

Photo by "African World"

AN OSTRICH FARM, CAPE COLONY

The monopoly being now in the hands of the De Beers Company, private enterprise suffered, and discontent and strife prevailed. As participation in the general good fortune was denied to the diggers, stealing and illicit trading became common. The system of "trapping" then came into vogue, and the successful "trapper" received a handsome reward. Many an honest man, through the treachery of a fellow who has dropped diamonds unnoticed into his pocket, has been unjustly punished, and in many cases imprisonment for ten years and more has been inflicted. The breakwater prisons of Cape Town can tell many a sad story of weary years of forced labour to gratify private vengeance.

On the Vaal River diamonds are found in the sand, in the river-bed, and in the near vicinity. These stones are deposited there after a journey from their original source, called "the pipe," which sometimes descends thousands of feet into the earth. This pipe resembles a crater, and is filled with a mass of bluish rock or "blue ground," in which the diamonds are embedded. To extract the stones the rock must be blasted, and when exposed to the air and weather it becomes like powder. Around this pipe the matrix is decomposed sometimes as far as thirty or forty feet, and this decomposition has spread gradually over the surface for a considerable distance. Such matrix has a yellow hue, and is known as

"yellow ground." These diamondiferous soils now go by the name of yellow and blue Kimberlite.

The pipes can be explored and worked properly only on a large scale. The work demands much machinery, and consequently much capital expenditure. The overflow, which must still be considered alluvial deposit, can be worked by a man with modest capital. The decomposed ground is easily workable and transported to water without difficulty.

Although the diggers on the Vaal River have extracted over £2,000,000 worth of diamonds, no attraction is offered for immigrants. The diamonds, which are of very good quality, are found in the bed and banks of the river, chiefly among great boulders; but stones are so unequally distributed, as with all alluvial deposits, that in most parts nothing is to be found, and the work and expenses of most of the diggers are lost.

The visitor to Kimberley, and indeed to any other part of South Africa, must beware of purchasing uncut diamonds from any but a licensed dealer. The penalties for such illicit diamond-buying, or "I.D.B.," as it is termed, are heavy, and ignorance of the law gives no mitigation of the penalty.

The visitor to Kimberley is permitted to visit the diamond mines and the diamond recovery works. The De Beers mine is the show mine, and is well worth a visit. It illustrates better than any other the pipe

formation that secretes the precious stones. The works where the stones are washed and recovered from their native matrix are specially interesting. After the large stones, both precious and otherwise, have been removed from the mass by hand, the residue, which contains the majority of the diamonds found, is mixed with water and allowed to flow over inclined plates covered with layers of wax. The precious stones adhere to the wax and the others flow away with the water. All the "dirt" is washed several times, and the stones that escape are very tiny and very few. The men employed in the recovery works include a few white supervisors, but for the rest they are black convicts incarcerated for a period of not less than five years, and employed by the De Beers Company under a contract with the Government. When the expiry of the term of imprisonment draws near, the convict is segregated for some time to make sure that he has concealed no diamonds in or about his person. Precautions are so thorough, investigation so searching, and punishment of guilt so drastic, that there is little undetected theft by the time-expiring convicts leaving the diamond-mine compound for freedom beyond the barbed wire fences that encircle the mine property. The stranger who is being shown over the diamond works experiences a sensation of concern if he learns for the first time that the black labourers, of whom

there may be a few hundreds between him and the door, are composed of murderers and other criminals who are held in durance by the presence of guards with loaded rifles. But there is little cause for alarm. The guard is sufficient, and revolt unknown.

I visited Johannesburg before proceeding north to Bulawayo, but the business that took me to the gold capital was not material to the object of my journey and is mentioned only that the record of my trip may be faithful. However, for the benefit of the uninitiated I will touch briefly upon the greatest centre of South Africa. On the bleak southern slopes of the Witwatersrand range, which forms the watershed between the tributaries of the Vaal and Limpopo rivers, and at a height of 5600 feet above sea-level, lies Johannesburg, noted for its wonderful gold-mines.

The town has developed with marvellous rapidity, and a visitor can hardly realise that not many years ago this spot was a part of a treeless and desolate veldt, with only a few straggling shanties to mark the first mining camp of 1884.

Fine shops, hotels, government offices, theatres, clubs, parks now line the regularly laid-out streets, and many suburbs with beautiful villas and gardens adorn the surrounding neighbourhood. One can now reach Johannesburg by rail from Capetown (1014 miles), East London (666 miles), Durban (483 miles), and Lourenço Marques (395 miles).

Forming a regular line along the reef east and west of the town are the many groups of mine erections, out of which stand prominently the high chimneys of the machinery buildings and the great white heaps of tailings. Here and there small green patches of tree plantations or fruit gardens relieve the otherwise bare country.

The mines extend as far as Boksburg and Krugersdorp, a distance of about forty miles. Goldfields also extend south-eastwards to Heidelberg, where operations are in their infancy, as well as to the south-west towards Potchefstroom and Klerksdorp and Venterskroon.

Around Johannesburg large tracts of land are being planted with eucalyptus and pine trees, which while providing timber for the mines and other building purposes, at the same time beautify the country.

It is hard to imagine that not very long ago the whole of South Africa was under the sway of powerful and cruel native rulers, who massed their people together in formidable numbers to resent the intrusion of the white man.

One may say that the most stubborn opposition by the black races against the whites recorded in African history has taken place here.

The firm hand of the white settlers has, however, broken the power of these natives, and although they

greatly outnumber the increasing white population, they now willingly serve their new masters.

The rapid inflow of Europeans steadily makes the possibilities of opposition more remote.

Resuming my journey north by the railway from Kimberley, I passed through the town of Mafeking, of heroic memory, and, some forty hours from the Diamond City, reached Bulawayo, the former capital of the Matabele and the present centre of Matabeleland.

Bulawayo, which means literally "the place of killing," is a pleasantly situated town, widely spread, but with many magnificent buildings. It is just recovering from a period of commercial depression. Its situation at the junction of the railway to Victoria Falls and the north gives it a position of vantage that is causing it to stand out with higher prominence as the principal commercial centre of the Chartered Territory. As this was the last town, properly so called, that I would touch before entrusting myself to the wilds, I purchased provisions and equipment here. As recorded elsewhere, and as frequently happens when a man takes the advice of others instead of acting on his own judgment, I bought far more than I need have done.

From Bulawayo, the Cape to Cairo Railway, or what will eventually justify the name, parts from the older line through Southern Rhodesia, and thither my path lay. The only place of even passing importance

THE VICTORIA FALLS AS SEEN FROM THE GORGE

The gorge in front is now spanned by a railway

Photo by "African World"

VICTORIA FALLS: MOONLIGHT EFFECT

in the 275 miles to the Zambesi is Wankie, where the enormous and valuable coal deposits have in a measure solved the fuel problem for Southern Rhodesia.

Then we come to the eighth wonder of the world—the great Zambesi Falls, better known as the Victoria Falls. Superlatives have been exhausted in describing Niagara, and when this treatment has been given to the lesser wonder, language is inadequate to its task when called upon to portray the awe-inspiring spectacle of the Zambesi River as it plunges from a height of more than two Niagaras into the most wonderful winding gorge that Nature ever gouged. The native name for the falls, "Mosi-oa-Tunge," is poetical and descriptive. It means "sounding smoke." In the absence of wind the vapour rises in five columns from the face of the falling waters and hangs in mid-air like the pillar of the wandering Israelites. In the poverty of their language the natives called this "smoke." I do not know if it has been ascertained how far off the roar of the giant cascade can be heard, but certainly for many miles. The surface of the land below the falls is on the same level as the land above the falls, so that the very long, sinuous gorge has the same depth as the falls—almost 400 feet.

A clear view of the whole expanse of the falling waters is hard to obtain, as they cannot be viewed from below. Along the opposing cliff the vegetation

is dense. It is nourished by the everlasting falling spray of the plunging waters, and the soil is swampy in places. This part is called the Rain Forest. Walking through it, it is possible from time to time to emerge upon the edge of the cliff, where at about twenty feet from the brink the vegetation abruptly ends with an edge of swampy turf. To get a view of the chasm depth one must peer cautiously over the brink of this precipice, where on the extreme edge rugged slipping boulders and deep cracks make the position dangerous.

The weathering of this rock is rapid, and although now only small pieces fall away, it is evident that whole sections of this wall will fall sooner or later. At the eastern edge of the forest and across this open space is a projecting and rugged point of the cliff over which one may peer below to what is called the Cauldron, where the raging waters of the cataract meet on their way to the gorge. The depth of the fall immediately opposite is 357 feet. From the bridge across the gorge and from several points farther to the east glorious views are also obtained.

The Zambesi Valley above the falls has an altitude of 3000 feet above sea-level, and many miles east it descends to a 1500-feet level. To the north the altitude gradually rises, in several terrace-like mountain ranges, until a plateau about 4000 feet high is gained. The Loana River lies below the escarpment, and the various

Photo by "African World"

LIVINGSTONE GOVERNMENT HOUSE

Photo by "African World"

BROKEN HILL, RHODESIA

A kopje of lead and zinc

tributaries which cross the flat surface of the plateau descend in small waterfalls through deeply cut gorges. Basalt, granite, diabase, and other igneous rocks protrude in various localities, whereas the schist and quartzite of the Karroo beds of South Africa lie flat in undulating patches. Through heavy denudations the greater part of the higher elevations is covered by a thick layer of earth, overgrown with bush and tree vegetation.

My journey led direct to the terminus of the railway at Broken Hill. At Livingstone, the first station beyond the Zambesi, the train stopped the greater part of a day. As the dining-car goes no farther than this point, the passenger must provide himself with provisions there. On the 14th December I arrived at Broken Hill, the starting-point of my wanderings.

II

THROUGH NORTH-WESTERN RHODESIA

AND BWANA M'KUBWA COPPER MINES

BROKEN HILL was the terminus of the railway from Bulawayo and Victoria Falls, the outpost that had just been connected up with the network of lines that constitute the arteries of commerce in the southern continent. One cannot survey the engineering enterprises of the Dark Continent without reflecting on their immense importance as civilising agents. Railway-building now precedes the settlement of a country instead of following it. It is a far-seeing policy that sinks money in railway schemes in a new country where the existing traffic is unable to meet the expenses of manipulating the lines. No agent is more potent than the railway in drawing out the resources of a new land and inducing their exploitation.

In spite of railway rates that would be considered extortionate in Europe, the railway at once cheapens commodities at every point it touches. Compared with ox and wagon transport, railway transport is always cheaper. A story is told in Bulawayo of the

time when the railway from Mafeking was first opened to traffic, and it may be taken as typical of what happens when a railway line begins to serve any far inland point. Before the railway came, ox-wagon was the only means by which manufactured goods could reach the capital of Matabeleland, and the cost of such transport was high—6d. a pound from the railway terminus at Mafeking. The railway came, and things were changed in an hour. A man visited a Bulawayo merchant, and made him an offer which seemed remarkable in its generosity. He produced some invoices, detailing goods that were on the way from Mafeking and that filled five wagons. He offered to make the merchant a present of the goods and fifty sovereigns besides if the latter would pay the transport charges. The merchant figured it out, reckoning the lower cost of transport obtainable by the newly opened railway, and then he declined the offer with thanks. He could have done better by paying market price for the goods and railway charges from the ports. I cannot vouch for the actual story, but it is quite within the realm of possibility, and it illustrates forcibly the benefits that the railway brings.

Railways are spreading their tentacles all over the continent of Africa. From every side the inland plateaux are being brought into communication with the coast by the locomotive track; the lion is dis-

turbed in his lair by the shriek of the steam-whistle, and after a brief protest is driven from his haunts into regions that have not yet been invaded by the advancing army of engineers. The sanctuaries of nature discovered by Livingstone and Bruce, Thomson and Stanley may now be visited by trippers too timid to brave the hardships by which alone those heroes cut their way through the unknown.

This railway from the south which set me down at Broken Hill is part of a grand scheme that was first conceived in the brain of the great empire-builder Cecil Rhodes, and that is slowly yet surely becoming concrete—a railway from Cape Town to Cairo. Since my visit, even, important advances have been made, and Broken Hill is no longer the terminus. The line has penetrated farther north and has now entered the Congo State, where it will be carried to the Lualaba River, a navigable tributary of the Congo itself. This will mark a definite and a most important stage in the railway history of Africa.

But my narrative must follow not what has been done since my visit to Rhodesia, but the record of the happenings during my journey. Broken Hill is a small mining town in a flat country, and is relieved by small pointed or round-topped hillocks, which consist of a mixture of quartzite, limestone, and schist. The entire hillocks contain an even distribu-

tion of zinc and lead ore. In places may be observed strings of pure ore, and excellent specimens were lying about on the ore dump around the excavation, shafts, tunnels, and quarries. Some caves have been exposed in the exploiting of the mines. They are somewhat similar to those found in Krugersdorp in the Transvaal. A few of them are filled with bones of different animals, lying in the oxidised matrix of the frame of the cave, and impregnated with the zinc and lead ore. Only from the top of these hills is it possible to obtain a good view of the surrounding country, as the interminable bush forest covers a vast area. On the south and south-east are several low-lying mountain ranges from which the country descends rapidly to the low region round the Zambesi. On the west the fall of the country is more gradual.

My baggage and equipment had to be taken forward from this point by native carriers or porters, because horses and oxen are the victims of the deadly tsetse fly, which is so fatal to live stock in many parts of Africa.

In arranging my equipment for transportation it was necessary to divide it into loads of from 50 to 60 lb. weight, packed in cases, bales, and air-tight steel boxes, the last mentioned containing all articles of value and goods that might be spoiled easily. Porters were not readily procurable.

The negroes were greatly in demand for the transport of goods from the railway terminus, and every available "boy"—all native male servants are called boys—was already engaged. Recruiting was extremely difficult on account of the demand for natives being in excess of the supply of those willing to be engaged, and I was compelled to be content with small batches of carriers and to send them on ahead. These preliminaries engaged me for six days, and then I was able to depart.

On Saturday, December 16th, I sent off the first batch of carriers, numbering 36, under the charge of a head boy or capito, and on the 20th I departed myself with three carriers, but still about twenty loads were left with the African Lakes Company to be forwarded as soon as boys could be procured.

In order to make sure of the chronometer time, arrangements had been made with the Government Observatory in Cape Town to send time signals for three days; but unfortunately from various causes, including thunderstorms, no useful results were obtained.

Pressing northwards, my caravan entered a thickly wooded country varied in places by small grass plains. As we proceeded, clusters of trees with a much fresher foliage indicated the position of large ant-heaps—peculiarly characteristic of the country. These ant-heaps are sometimes 40 feet high and over 100 feet in diameter, usually covered with bush or grass, and

sometimes big trees, while some are barren, with reddish-brown soil. A rich variety of flowers and plants covered many of the ant-hills and spread around their bases. Agriculture could be carried on with advantage in these regions, as the soil of the ant-heaps makes a valuable fertiliser.

It was late in the day before I had been able to leave, and we had marched only about five miles when we saw that a heavy thunderstorm was blowing up; so we had to form camp much sooner than anticipated at the Melangushi River, where a patch of open grass plain afforded good camping-ground. By the river few trees were to be seen, the vegetation partaking more of a bush character, with many creeping plants.

My carriers, who had been recruited for me by an agent, already began to grumble about their loads, although the weight was fairly and equally divided before leaving. We were still too near the point of departure for me to be firm. If the men had left me I should have found it impossible to replace them, so I had to humour them somewhat. We resumed the march next morning.

As it was the rainy season, it was difficult to proceed without frequent stoppages, due to sudden and heavy storms. We traversed a forest-like country with an undergrowth of grass, varied with flowers and bracken. The stream valleys, overgrown with a

wealth of flowers, were the most fertile localities. It is a peculiar feature that the usual tree growth does not generally extend into these valleys, but ends abruptly and forms a regular border to within about 200 feet of the river-banks. We crossed numbers of these valleys, some of them swampy and difficult, but on the third day we made camp at the Kilangosi Kraal. Before we entered the kraal or village, the chief and some of his followers met and greeted us in the usual manner of the country by clapping their hands. I purchased food for the carriers—maize—the price being 15 lb. for one yard of calico.

And so we proceeded without special incident in an almost northerly direction, but sometimes to the east and sometimes to the west, crossing the Kamibenga, Fipunga, and Kempelambi streams. The character of these streams and the intervening country was not different from that of the former part of the route.

On December 24th we camped at Shamaputas Kraal. Game was not very plentiful, and we met only small herds of eland. On Christmas Day we made a very short march to the Lukanda River, where we rested. Here the carriers again exhibited discontent, and the capito, who was responsible for the conduct of the men, had to be severely reproved.

We were now right in the belt of the tsetse fly (*Glossina morsitans*), the species which is most

dangerous to domestic animals, but we had not yet been troubled very much by these insects.

Rain fell with great regularity. About five o'clock every afternoon it came down heavily, and continued with only brief pauses through the entire night. Our trek was consequently little interrupted, as the regularity made it possible to arrange our departure and camping almost to a time-table. We traversed almost continuously the watershed of numerous shallow streams, which increase their volume and swiftness as they seek the lower country. After we passed the Lasanga, Mashingu, and Kaschitu streams, all of the same shallow character, winding through grassy plains starred with bright flowers, the scenery changed for the first time since our start, and a belt of hills, running in an east and west direction—the Katenina Hills—came into sight. An easy ascent gradually brought us to their base, where we took a welcome rest after a very fatiguing march in the great heat of the day. A climb over the stones and rocks to the top of the hills was rewarded by a fine view of the country through which we had passed and the stretch that lay before us.

As there was no water near, we had still to undertake a long march to reach the next village. Our road lay under the spurs of the hill range that stand out as quartzite kopjes. The whole country dips a little to the north to Makongo-spruit, a consider-

able distance ahead, and on this lies the village M'Tafue, which we entered just as a heavy thunderstorm broke. We sought shelter under the projecting roof of one of the native huts, and when the thunder-shower had spent its force we finished a hard day's work by pitching our tents for the night.

The natives in every village of this part of the country offered for sale quantities of excellent wild honey, and we purchased all we wanted. Food generally was very reasonable in price. For a calabash or pumpkin-gourd filled with wild honey, the quantity being sufficient to fill three quart bottles, we paid two yards of calico which had cost sixpence a yard in Rhodesia, and which could be bought for a third of that price in wholesale quantities in England. One yard of the same calico secured 15 lb. of sweet potatoes, and two yards was the exchange for three excellent fowls.

The marching was under excellent conditions, as the forest trees afforded shelter from the sun during the heat of the day. But the "boys" were lazy, and we could scarcely get them on the march before ten o'clock in the morning. The days' journeys were usually from fifteen to twenty miles.

On the 28th December we became aware that caution was necessary on account of lions. On that date we reached Consomonoro Kraal, and a native came to us excitedly with the news that a woman

NATIVES OF THE VILLAGE TAMINA

NATIVES BRINGING MEALIE MEAL FOR SALE

THE MARCH OF MY CARAVAN

had been eaten by a lion close by, only a few bones and the feet being left. The native never masters his fears of the king of beasts. He never seems to accustom himself to the proximity of the animals ; and while a white man will betray little concern regarding lions, unless they be dangerously near, the distant howl of the marauders on the midnight air is sufficient to put a whole convoy of native porters in a fever of excitement.

On December 29th we made only a short march, which, however, led us across the River Kalalanguba to the Matipula Kraal, on the Kafulafuta, which, though only about ten feet across, has steep banks and a strong current, making its passage a labour of some difficulty. The tree growth became thicker as we advanced, and an occasional palm reared its head against the sky from the lower shrub and timber growth. At our camp here the lions lost us some sleep, their roaring breaking the stillness of the night, but we saw nothing of them in the darkness and the rain. We were early astir next morning and made an early start, but after a march of about six miles the boys professed to be tired, so we rested by a small stream until afternoon, and on resuming our march were caught in a severe rain and thunder storm. The village of Tamina, our next camping-place, lay across the River Chimpwala, which was considerably swollen, involving a hard crossing after

a long and fatiguing day's work. At last we were able to make camp.

We were now approaching the copper mine of Bwana M'kubwa, to which point my carriers had been engaged. On the last day of December we reached Kom's store, which is half-way between the last kraal and the mine. Here I made a few purchases. Near the store is an extremely broad and swampy watercourse, where the storm-water had carried away a primitive bridge of logs and branches tied with native rope made of tree bark cut into strips. Over the ruins of the structure we had to climb, an extremely difficult task for the carriers.

On arriving at Bwana M'kubwa I found that the first batch of carriers were rebellious. It was quite time to send them back. It is never satisfactory to hire boys from another master, because they are apt to resent any other authority than his, to take reproval with a bad grace, and to lie like politicians at election time.

I was kindly received by the manager of the mine, and after spending with him New Year's Day and the few days following, I procured fresh carriers and left for the Congo border, which was about thirty miles ahead.

Some eight miles from Bwana M'kubwa is M'Tola, the last post-station, where the only white resident is the Native Commissioner, who superintends the post-

office work, as well as performing other official duties.

I took advantage of the return of my discharged carriers to Broken Hill to send thither my cases of collections and correspondence. The work of arranging my botanical and geological specimens for transportation occupied me for about a week, and during this time I procured fresh carriers, whom I sent on in small parties to the Congo border backwards and forwards till all the goods were away.

Again only a temporary arrangement was possible, as Rhodesian natives are prevented by sleeping-sickness regulations from crossing the Congo border.

On the 9th of January I left Bwana M'kubwa, and after walking through forest country for about ten miles I reached the Kafue River, where I found the ruins of another primitive wooden bridge. It was quite useless as an aid to crossing, and the carriers had to wade through the broad expanse of rushing waters nearly up to their shoulders. I scrambled over a portion of the bridge and was carried the rest of the way by several boys. A few packages fell into the water and were with difficulty extracted, but with no further accidents we got safely to the other side.

The trans-Kafue country assumes a different aspect, being less wooded, with trees in clusters and many isolated palms. Bamboo shrubs appear on the still

frequent ant-hills, many of which are covered only with this growth. Occasionally the way led into open rolling grass plains, relieved by groups of small trees and shrubs. The neighbouring forest sends out numerous arms into these plains, and there are many swamps overgrown with man-high elephant-grass, whose light green hue contrasts pleasingly with the darker foliage and makes many picturesque patches. We had glimpses of small and large antelopes, sometimes alone and sometimes in herds, grazing on the plains. The creatures fled in alarm at our approach, showing only their heads as they sped to the shelter of the high grass, jumping as they went, stopping sometimes to look wonderingly back, and finally disappearing in the thick shelter of the dense growth.

The lover of animal life or the sportsman should travel some distance in advance of his caravan if he would view the game at close quarters, because the noisy negro carriers scare them into flight. In plains such as these the traveller may see many an interesting and curious picture of animals in their natural state, and a hunter can obtain excellent sport.

Few native villages were passed in the section of the watershed we were now traversing, which is looked upon as the Congo border, but farther north, in a wide, fertile valley watered by two small streams, a number of small kraals are dotted about. On the southern

side of this valley I camped for the first time in Congo territory.

At this point I had reached the end of my march through the Chartered Company's territories in Northern Rhodesia, and was about to enter the territories then under the sway of King Leopold of Belgium—the Congo Free State.

This point is the proper one for a brief retrospective glance at the country through which I had passed. The plateau I had crossed has an altitude of from 3000 to 4000 feet, and forms the high watershed of the Kafue and Luapula rivers. The country was well wooded, but the timber growth was by no means dense, the trees being tall and slender with the foliage chiefly on the higher branches. In a few places the growth was thicker, but the impression generally was of a thinned-out forest. The open nature of the trees admitted light and sunshine and made possible a thick undergrowth of grass and flowers, the former being generally about two feet long. This open forest growth divides the area with open grassy plains, well watered, and capable of generous return for the labour of tillage. The trees stop short of these watered plains and form borders around them. It seems that they do not thrive except in hard and comparatively arid soil, but this does not impair the potential value of the plains for cereal and other crops. Generally speaking, these plain-lands are

suitable for white settlement, and are bound in time to attract the immigrants from our crowded cities and farm lands of Europe. The advent of the railway has brought perceptibly nearer the exploitation of the agricultural resources of the entire region, which awaits only wisely directed labour to become a considerable economic asset to British dominions in Africa. There is only one great obstacle. The deadly tsetse fly is common in many parts, and is fatal to domestic animals. But all localities are not infested by these insects, which tend to localise themselves to certain belts of the country. These stretches of country are not inviting for any agricultural or industrial enterprise that demands the use of animals for its prosecution. In time the tsetse fly will be expelled. The measures that will achieve this are well understood—laying dry the stagnant water pools, cutting trees, and burning the sodden grass where the insects breed. But that is a work of time, and it cannot be accomplished by a handful of settlers. First the tsetse-free region will be settled, and gradually the settlers will invade the domain of the pest, recovering it as they go, until they have finally and completely driven it to extermination in their fight to make the Northern Rhodesia the white man's country that is within the compass of its possibilities.

The climate is healthy and not too hot. The mornings are fresh and breezy, and in the height of

the day the temperature is seldom in excess of 85 degrees Fahrenheit. The evenings, from about five o'clock onwards, are cool and rainy. The water has generally dried up in the morning, and only in the long grass is the moisture held until about nine o'clock. Travelling is distinctly pleasant, and the trees provide a comfortable shade from the direct sun even at its zenith. Finally, that prime agent of civilisation, the railway, is providing the necessary facilities of transport, and already the isolated mines and white stations are reaping all the benefit that comes with the locomotive.

The natives constitute an interesting study. In temperament they are lazy, but in this respect they resemble all primitive races with easily satisfied wants. The male is generally beardless, and likes to shave portions of his head. When he attains manhood he is tattooed, or rather blistered, on the shoulders, chest, and arms, and the designs are often rather pleasing. A loin-cloth is usually the only costume, although sometimes the body is fully draped with blue and white calico.

The native exhales from his body a strange and characteristic odour that offends the olfactory sense of the white man. In their kraals or villages the men pass most of their time smoking their calabash pipes while the women do the work, which consists principally in cultivating little patches of ground and

in grinding meal in the primitive quern. The women braid their hair into plaits, which hang from the forehead to the nose, where they are tied together and fastened to a single large bead which dangles in front of the face.

The kraals are irregular and untidy, the huts being put down without arrangement or symmetry about the small fields that they cultivate. The huts are circular in shape and about six feet high in the centre. The roofs slope to the walls, over which they project about two feet. The walls are about three feet high. The frame of the hut consists of wooden posts covered with grass thatching, and the walls are often smeared with mud to make them weather-proof. The natives do not sleep on the ground, but use a crude sort of bed made of wooden poles and stretchers fixed into the ground round the hut and covered with closely woven grass mats. Sometimes these beds are screened off by hangings of grass mattings. In the centre of the hut an open space is left for the fire, the smoke of which finds an exit through the cracks in the thatched roof, where the black soot hangs thick.

Although the soil is capable of producing many vegetables and fruits, the natives cultivate only small patches of land around their huts, and in such places they cut down the trees from four to five feet from the ground, leaving the stumps, between which they

plant maize, Kaffir corn, and sweet potatoes, on numerous small mounds about nine inches high. The fresh growths on these tree-stumps are cut away until the tree eventually dies.

In his capacity as a transport animal the native has much in his favour. He is very careful with the packages entrusted to him, and will carry a load for months without accident or breakage. It is possible to put eggs or equally fragile articles into a box, with confidence that they will be delivered at their destination safe and uninjured. A band of carriers is usually under the control of a head boy or "capito," who makes himself responsible for the safe transport of the goods. With an average capito the traveller may give his orders regarding the distances to be covered and then proceed at his leisure, confident that his goods will be found safely awaiting his arrival. If such a loose "arrangement" were made in Europe the risk would be immeasurably greater. I must admit that more breakages happened to my equipment on the railways to and from the interior and leaving for Europe than on the whole journey through wild Central Africa.

A native is generally referred to as a "boy," and indeed he is simply a grown-up child. He plays, sings, and dances, and is amused with a trifle. He is fond of practical jokes, rejoicing exceedingly if his comrade on the march slips on muddy tracks. When

my carriers did not want to go farther, or wished to stop at a certain village, they would make ingenious excuses, and often assert most emphatically that there was no water within ten miles or more, though they knew that at nearly every mile streams would be passed. They sing on the march, especially when entering and leaving a village, or when tired. They possess musical talent, and their voices blend and harmonise alternately in solo and chorus, the strains enlivening the arduous march of the white man.

Cleanliness is not one of their strong points, and many of my carriers had the bath of their lives when their line of march lay through an unbridged stream which they had to enter to the armpits in its passage.

30
RHODESIA
TO
UGANDA
to illustrate
"From Rhodesia to Egypt"
by
THEO KASSNER, F.R.G.S.
Scale of Miles
0 50 100 150
Author's route shown thus
Railways
BELGIAN
UNYORO
UGANDA
Kalika
Toro
Usoga
Kavirondo
Victoria Nyanza
Lake Edward
Lake Albert
Ruwenzori
Butembo
Kivu
Mpororo
Ankole
Kagera R.
Nile R.
Albert Nile
Semliki R.
Lake Victoria
Kampala
Entebbe
Mengo
Fatiko
Foweira
Kasenyi
Kabarega
Mwenge
Kakungulu
Bulamwezi
Kiruruma
Kyaka
Kasese
Kyaka
Kyaka
Kora
Kilis
Mole
Kotoli
Masindi
Kiboro
Kinyara
Kibiro
Kibuga
Kibuga
Kibuga

RHODESIA
TO
UGANDA
to illustrate
"From Rhodesia to Egypt"
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THEO KASSNER, F.R.G.S.
Scale of Miles
0 50 100 150
Author's route shown thus
Railways
30
East from 30 Greenwich
0
5
10
BELGIAN CONGO
BRITISH EAST AFRICA
GERMAN
ANGOLA
RHODESIA
UGANDA
Kalika
Lake Albert
Lake Edward
3000
Lake Kivu
Lake Mweru
Lake Bangweolo
Lake Nyasa
Lake Chiuta
Lake Shirwa
Lake Amelia
Lake Chilwa
Lake Mweru Marsh
Lake Bemba
Lake Kabele
Lake Kamuchawa
Lake Lufira
Lake Kisale
Lake Kabwe
Lake Kamalondo

III

IN THE SOUTHERN CONGO

THE RIVER LUAPULA OR KATANGA

I ENTERED Congo territory labouring under the prevailing ideas regarding the land, its people, and its administrators. My impressions of the country had been formed from the statements and stories published in the English Press. These stories had led me to expect a sort of combined charnel-house and torture-chamber, where white men wrought untellable atrocities upon their black fellows and where the altar of Mammon ran red with blood from black arms shorn of their hands. I had been duly impressed —as who could fail to be—by Mark Twain's treatment of the subject. A friend had put his book into my hand before leaving Europe. I went prepared to see evidences of the hellish work of which I had read, and anxious to lend my aid in exposing such evils as came within the scope of my observation during my journey. It may be well that, before proceeding to detail any experiences in the Congo territory, I should place on record my opinions regarding the administration and the barbarities laid to the charge of the

administrators. In investigating an ordinary subject the evidences bearing on it come to the surface as the investigation proceeds. But in this case it was not so ; no evidences came to the surface, and therefore the story of my journey which occupies the following pages will be found quite lacking in any incidents or scenes that would supply fuel for the fire that rages against the Congo authorities. In a sentence, I exonerate entirely the Belgian administrators from wanton cruelty in their treatment of the Congo natives. The officials are all European and most of them are gentlemen. It would be remarkable that the change of latitude from the Low Country to the African Congo should transform a white man into a fiend. In my travels through the country, I saw, among the many thousands of natives whom it was my lot to meet, only one man who wanted a limb, and I could not ascertain how he had lost it. It may have been accident or disease, or, on the other hand, it may have been the work of a fellow-man ; but I am unable to say how the arm was lost, although I tried to ascertain.

Now, it is a generally sound maxim that there is no smoke without fire, and I am aware that I cannot give the Congo administrators a clean sheet without being expected to say something about the tales of atrocity, and I do not shirk the task. I shall explain my opinions regarding the whole tissue of statements

that has been woven by those who bring the indictment against the Congo Government.

To begin with, it must be admitted that the Congo territory requires to be policed and that it cannot be policed with white soldiers. The climate is not suitable for large numbers of white soldiers ; the numbers required for an effective force would be too great and the expense of their maintenance too high. So there is the absolute need of policing by black soldiers. Now look at the raw material from which these levies are recruited. They are savages of a low grade, some of them cannibal tribes, and others about as low in the scale of social practices. Such recruits are enlisted under white officers, drilled as well as can be, and placed on active service. Then what happens ? A party of two hundred such soldiers under one white officer may be sent to demand satisfaction from a native chief or sultan whose warlike conduct or aggression has stirred up discontent and threatened tribal wars with some neighbouring chiefs. The malcontents must be reduced to submission. Good government demands it, and requires that the arm of the supreme authority should administer a chastisement that will be exemplary and lasting in its lesson. There is a battle between the black hordes of the rebellious sultan and the native army under the Belgian officer. Both sides fight as they have been used to fight. They know nothing of the ethics of modern warfare as waged

by civilised nations. Possibly they would think the methods of warfare approved by civilised nations, whereby a thousand men may be sent to their last account by the explosion of one mine, more barbarous than their own. Anyhow, they fight valiantly, and quarter is not a part of their fighting policy. The officer in charge may try to restrain the savage excesses, but when the tiger madness to fight has been unmuzzled the officer is powerless to guide the wild beast he has unchained. Thus there have doubtless been cruelties in the Congo, the cruelties of war practised by one savage band against another, one band being in the service of the Government. But to charge the Government with mutilation and torture as a fixed policy is to make a false charge. The regulations made by the Congo Government in its conduct towards the natives have been for the good of the natives, both in their intention and in their effect. In many respects they are superior to the native regulations in British Africa. British authority does not rule enough. It leaves the native in his sweet idleness, allows him, if he will, to rest under his figurative fig tree while his wives toil for him and bear him daughters, whom he sells when they have attained marriageable age.

That, then, is the basis of the stories of Congo atrocities. If a black is injured by a black man who is in the service of the whites, then he is said to have

been injured by a "white." The vernacular assists this error. A negro who serves a white man is called a white. It is surprising that, when stories of cruelty have gone abroad, this fact has been forgotten, and the charges of barbarism against European officials have been held true in the courts of public opinion influenced by the special pleading of yellow journalism. My vindication of the Belgian officials must not be taken in too wide an interpretation. I do not assert that no Belgian official has ever been guilty of cruelty towards a Congo negro. There are cruel men of all races, and when a brutal man is vested with power far from a central control in a far land, where he is free from the restraints imposed by public opinion, he is apt to give his cruelty the rein. But such cases have been exceptional, and none came under my observation. They have no approval from the Government of the Congo, which seeks to deal justly by the natives within its jurisdiction and chooses officers considered likely to carry out a humane policy.

The part played by the newspapers of England in the fomentation against the Congo administration has not been a creditable one. The spirit of sensationalism has permeated English journalism. Big headlines and superlatives usurp the place of accuracy and plain statement of fact. An exaggeration or untruth in a loud voice or in big type sells a sheet

when sober truth would condemn it to the "returns." To this fact more than to any other single cause is due the British view of Congo administration. Political and commercial motives may have been contributory causes, but they have been secondary.

The importance of the subject is my only apology for going at such length into the causes of the atrocity rumours, and I have discussed the subject before describing my journey through the Congo in the belief that it may attract attention.

At the beginning of my march through Katanga, as the southern part of Eastern Congo is called, I was much troubled by transport difficulties. In this part the natives are not much looked after by the authorities, and I found the greatest difficulty in recruiting carriers.

My first camp was on the Lukanga stream, and as my Rhodesian carriers had to return I was absolutely in the hands of the Congo natives. Every art of persuasion was used to induce the kraal boys, who were numerous, to transport my goods to the official station, about one day's march ahead, but the efforts were vain. No one would even tell me where the station was, and all answered that they did not know. Fortunately a native was encountered who was passing through, and he gave me the desired information. I distributed the flesh of four large sable antelopes with the hope of inducing a few carriers to enter

my service, but as soon as they got the meat they disappeared. For nearly fourteen days I was kept in this place, but at last I managed to persuade nine "boys" to carry the most necessary things, so I sent them off in haste, lest they should change their minds.

The way led through undulating country. The character of the northern watershed of the Congo tributaries is different from the country I had already passed. The banks of the streams are overgrown with dense tree vegetation, and the beds of the watercourses cut deeply into the earth crust, or in places are covered with a wide expanse of swampy forest-land, tangled with creepers and overgrown with ferns, with many decaying tree-trunks blocking the way. In many places the snout-ploughed soil gives evidence of wild pigs. As the traveller follows the native foot-path northwards and leaves the swampy forest behind, he rises to higher dry land, similar to that of North-Western Rhodesia.

A good day's march brought us to the village of the Sultan Kitimbo, on the River Lusale, and turning to the east, we crossed the Lomembe River, where the Congo official I wished to meet was found. His stay here was only temporary. He was arranging for the laying out of a new station. He received me with courtesy, and after hearing of my troubles he immediately gave orders that sufficient natives should at

once fetch the goods left behind, and next day all my carriers arrived.

The surrounding country was very pretty. The winding Lomembe River, which is about twenty feet wide, is beautifully clear and is shaded by many large overhanging trees. Great patches of beautiful ferns cover the banks. The climate is excellent and the altitude 4000 feet above sea-level.

Away from the Lomembe River to the west the country gradually rises in open grass plains with hillocks covered by trees and bushes. The grass carpet was bright with beautiful flowers, and hiding behind one of the tree groups I was fortunate enough to get near some roan antelopes which were grazing near, and was able to survey them at close quarters. Before leaving the station Kitimbo the carriers were all examined for any signs of sleeping-sickness. Six suspicious cases were found and were discharged. The names of those allowed to come with me were all registered, with that of their sultan and villages. This registration system works well when the employers are stationed in the district, but for transients who must proceed every day it causes a good deal of delay. It was unfortunate for me that next day the official had to leave for his head station of Kalonga, as the new carriers, knowing this, were able to play their old tricks again.

I purchased food here—eight fowls for six yards of

limbo and forty pounds of mealie meal for three yards—and with eighty carriers I started on the day following the departure of my good friend the official. After a march of ten miles we camped with the intention of making an early start next morning. But next morning ten of my eighty boys had deserted. This meant a rearrangement of the baggage, and some of it had to be left behind to be brought up by carriers whom I would send back for it. I had also to keep a close watch upon the other boys. Travelling under such conditions was slow and harassing.

But we proceeded, and soon crossed the Lomembe River and several tributaries on the eastern side. Then our direction was due north. As we neared or left the river we traversed patches of high grass and emerged into open, higher plains between its tributaries, bordered with much tree vegetation and an undergrowth of bamboo. This tract of country is extremely fertile, and the natives are numerous and widely distributed among their patches of cultivated land. Concentration into villages seemed not to be the custom. On the second day from the village Kitimbo camp was made at the village Kandu, named after the native chief. To this point the trouble with runaway "boys" was incessant, and it was with great difficulty that my goods were brought so far. On the next morning after our arrival ten more boys had disappeared. It was necessary to visit the surrounding

kraals to recruit more carriers, but none could be obtained. Everywhere the huts were empty, and the able "boys" had disappeared into the bush. Returning to the camp, I found that another five carriers had decamped, and about ten o'clock the remaining "boys" with the two capitos had deserted also. The chief was called, but either he did not want to help or he had no power over his people. They declined even to sell me food, although they had plenty.

It was imperative that I should keep watch through the night, as I feared what might happen. In spite of all these troubles, the beautiful surroundings were some reward for the annoying delays.

This high and healthy land is well wooded with trees of fresh green foliage and bright flowers in profusion. After about three days and much worry, thirty-two carriers came forward, and I started with them at once, in the hope that I might recruit more on the way and send them back for the remaining goods. We saw no village for two days, and had to carry food which, fortunately, the carriers had obtained before starting. Travelling as we now were through lion country made desertion more risky, and that day we made a long march before camping on the small Lutaka stream.

The carriers at once took precautions against attack from lions. They cut down trees to make a barrier round the camp, and collected quantities of

TYPICAL NATIVES OF SOUTHERN CONGO

Among whom I had so much trouble

THE REST-HOUSE AT KINIAMA

These shelters are erected all over the Congo and are greatly appreciated by travellers

wood and made great fires, which were kept burning throughout the entire night. When the sun sank we soon heard the distant roar of lions, which got gradually louder and nearer. A low, hollow, frightened call from the "boys" went through the camp, and sent the chill of fear through everyone. The fires evidently kept the lions at a distance, for they made no attack. Here I came to a "rest house," one of the huts erected by the natives under Government instructions for the accommodation of travellers.

Such houses are found at regular intervals along the main roads, being usually about one day's march apart. They are typical of Belgian administration, and are welcome conveniences for both white and coloured travellers. They might well be copied by the authorities of other sparsely settled countries. Upon their walls is displayed a scale of prices for provisions that may be purchased from the natives in the neighbourhood, and the publication of this fixed tariff is a valuable check against extortion. On this occasion, however, I failed to secure any native carriers, and had to return to my company as I had left it.

Next morning a short march northwards brought us to the great Luapula River. The country assumed a more open and flatter aspect, with groups of low mimosa trees and other shrubs, while pools and dry hollows made openings between them. A village

of which we had been told on this river was not to be found, and some of the carriers suggested a village about an hour's distance across the Lomembe River again, saying that it was the only one within many miles. Afterwards I found this to be untrue, as they only wished to spend an evening with friends and make plans to desert. As it was late in the day and rain was beginning to fall we had to form camp.

The "boys" again exhibited discontent, and it was obvious that they would bolt at the first opportunity. Therefore I hurried to the big road by the Luapula River, where I thought that I might be able the more easily to procure some passing natives.

Next morning on waking, in spite of all precautions and the watch I had told my two faithful personal attendants to keep, the whole black brigade had disappeared, and we found ourselves stranded once more. Luckily we were on the main road, which in these parts only means cleared bush and grass, and there was some hope of getting into touch with villages where carriers might be sought. A "boy" who chanced along the road was willing to work for me, and I sent him at once to recruit others. He returned with only six, and with these I moved on to the next village, where I was successful in obtaining carriers to send back for the remaining loads at the Lomembe and also those left at Kandu's kraal.

In the meantime I proceeded to a big village called Kiniama, where I stayed to await the arrival of the whole caravan. I had been travelling in this erratic and irregular manner for three entire weeks. The kraal where I now found myself is prettily situated on the swiftly running Malenga. My journey to this place had been in a north-westerly direction, always parallel and within a short distance from the Luapula River, continuously traversing its tributaries, some large, some small, but all full of water at that time of the year, the rainy season. These tributaries all rise on a range of hills to the west, and flow by small successive rapids through well-wooded rocky gorges and over rich grassy plains down to the Luapula. Along the main road they are all spanned by wooden bridges. Almost everywhere are habitations, but the huts are much scattered. Considerable areas are under arrowroot, and maize is grown to a slight extent, although millet appears to be not so plentiful as farther south. Ground or monkey nuts and small beans are also plentiful. A little way from the Luapula River, where the country is higher, the climate should be healthy, but the tsetse fly makes cattle-farming practically impossible.

The natives do not differ much from those met in Rhodesia. They are of strong build and generally healthy. They cultivate their land industriously, the work being mostly performed by the women.

The huts are built of grass over bamboo frames, but not much care is bestowed on their construction. The men carry spears or assegais made from iron, which they obtain from their brothers in the north. They also make a hoe for use in working the land. For storing their crops they erect round barns with floors and walls of clay raised a few feet from the ground, and with movable roofs which they take off when they throw in the grain.

Both men and women are tattooed by some peculiar process which raises permanent blisters, but there seems to be no tribal distinction here as in the north. They shave off almost all the hair. The men wear ivory rings on their fingers, while the women have small circular tokens in their noses. Bead necklaces and wristlets are in use by both sexes. All are lazy and dirty. They have a peculiar practice of filing their front teeth to a point, and they consider that their charms are increased thereby.

They hunt game with poisoned arrows. In the village Kiniama the first native forge was seen, and the chief was busy making copper bullets for an old Snider gun, a primitive bellows being made from skin. He blew through a small hollowed-out ant-heap on to the coals.

Their fighting weapons are not usually exhibited to a stranger in time of peace.

Their staple article of food is arrowroot, though

sweet potatoes and millet are also grown. The arrow-root is merely skinned and baked in hot ashes, and prepared in this manner it is not distasteful; but a good appetite is necessary to make a satisfactory meal of it. The sweet potatoes are eaten raw or roasted. The millet is ground fairly well by the women between flat stones (with a heavy wooden pestle), or in a wooden mortar neatly cut out of a tree-trunk. Cooking is performed in native-made clay pots, some of which are prettily decorated. The clay is fairly thin, but will stand a good deal of heating and rough usage. Fingers perform the office of spoons, forks, and knives.

Water is the chief drink, but a kind of beer is made from millet and is drunk unstrained, so that it is somewhat acid. Occasionally wild honey is added, when the beer is excellent and very intoxicating.

The trading medium is calico or limbo, white and blue, or with a pattern, but mostly of the coarsest and cheapest quality. The Congo Government pays with a good quality of stuff, which the natives favour before any other because of its lasting properties. One yard will purchase four or five fowls or 30 lb. of millet meal. On the main road commodities were more expensive, yet not too exorbitant. The fowls are of a special, small kind, no bigger than bantams, and seem to be a true breed. Their plumage is varied—some white, some brown, black, or spotted.

The native eats no eggs, but hatches them all. The eggs offered for sale are mostly bad, and must always be tested before being purchased, as they are often taken from sitting hens. The native cook takes great delight in examining them; when he finds a bad one he throws it with keen enjoyment among the black onlookers, whom he considers his inferiors. These negroes are tricky salesmen. The food for the caravan is brought by many natives, each one carrying the smallest package possible, sometimes only a handful in a lot of leaves so as to make it look big, and each demands an equal reward. In this way the caravan supplies became very expensive, especially in the absence of plenty of beads of the right kind for smaller payment.

The bartering material, chiefly limbo, beads, and wire, requires many carriers. The "boy" who carries a wooden box or steel trunk usually makes a round pad of grass to relieve the pressure on his head. Some loads are carried on the shoulder, and others are fixed on forked sticks and carried with the aid of another stick over the shoulder. Good carriers cover from twenty to thirty miles a day, eating only morning and evening. No matter how securely a box is fastened, a "boy" will always tie his rope of bark many times round the load.

In every village the natives are very fond of beating their drums, which are made out of a hollowed tree-

trunk, with a fine buckskin stretched across it. The attractive singing referred to in North-West Rhodesia is much less common, and from here the native voices are almost unpleasant.

For money the native has at present no use, but the adoption of coin as a medium of exchange is only a matter of time.

While camping near the rest-house on Lupaka stream I was fortunate enough to meet the Governor of the Congo, Monsieur Wangerme, who was passing on his way home to Europe. He gave me assistance to procure carriers, although this was only a temporary relief, but he also gave me much useful information. After we had lunched together he proceeded on his bicycle—the cycle is a very useful vehicle in this country.

This chance encounter with so courteous an official was a source of great satisfaction to me. His own experiences enabled him to sympathise with me in my transport troubles, and he gave me heart by informing me that farther north the natives were more willing to work and of higher moral character. He gave me letters to the next custom officials, and also a provisional letter to recruit boys.

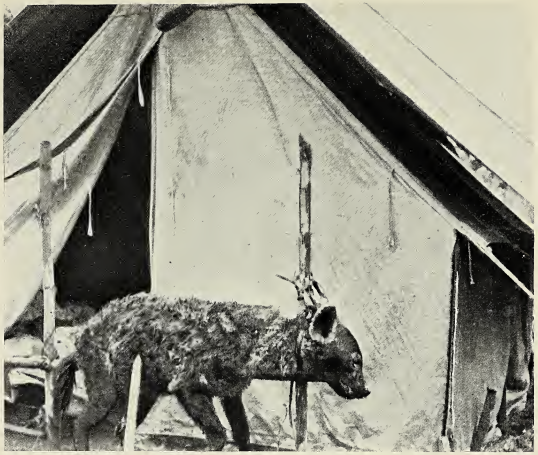
It is important to be weaponed with all kinds of papers and documents. For instance, to carry arms through the country one should have a permit from the Government of his own land. Letters of intro-

duction to the head administration of the country are also valuable aids to safe-conduct.

The sultan at Kiniama was very cunning, and all the promises he made regarding carriers were not fulfilled, and, fearing complications, he disappeared entirely from his village. I therefore had to proceed in the same slow manner as before, delayed a long time in every village. In persuading the "boys" to go backwards and forwards for the loads often as much as eight days were lost. Travelling along the main road was comparatively easy, and the whole caravan could be kept in sight.

The largest tributary of the Luapula, the Lomembe River, was passed, and on February 17 we reached the village of Chevele. In addition to several large rivers passed were many small bridged streams. At this kraal I noticed for the first time that the negroes play a game on a board with thirty-two holes, from one to another of which they move black beads. Large groups sit round watching, but I could not ascertain the purpose of the game.

The ant-hills encountered are grown over by a kind of acacia, out of which the natives make string which is useful and very strong. I camped here for several days near the rest-houses. The nights were much disturbed by hyænas, which came close up to the tent. My canvas bath was carried away by one of them, and I found it next day torn to



THE HYÆNA WHICH CARRIED AWAY MY BATH

THE SAUSAGE TREE

Luapula River

NATIVE SOLDIERS OF THE CONGO STATE

CHARACTERISTIC RIVER SCENE IN EAST KATANGA

shreds. Finding it provided an unsatisfactory meal, the animal returned and sprang against the tent with much force, again awakening me. Looking out of the tent, I could just see it in the moonlight slowly slouching away and occasionally looking round. I chanced a shot at it and killed it, for next morning I found it lying dead some distance off.

Wild geese were plentiful at this stage of my journey and made an agreeable variation in our meals.

Hartebeests and sable antelopes also abounded in plenty. The only plan now to get forward was to take carriers from one village to the next. Villages were more numerous, and I found the "boys" willing to do short stages. But I could not even then procure carriers enough to take the whole equipment at once, and had to send it off in detachments.

We passed the village of Majaka, where a native child had just been buried. The mother, according to custom, cried continually for two days. For an adult the relatives cry for a month, and for a chief six months, and sleep is out of the question at such a time, for the wailing is incessant day and night.

The rain also delayed our progress. In the rainy season many large caterpillars are to be found, and these the natives collect and cook. They cut down and destroy beautiful trees to obtain honey. A curious manner of greeting is practised. When two

natives meet they stop, slap the left hand on the thigh and then raise it in salute.

We proceeded and camped after the next marches at the villages of Luembe and Mafumbi ; at the latter place we found the first banana plantation.

Here I received thirty carriers with two capitos sent from the head station Lufaku, to which I had written some days previously in complaint. The official capito, distinguished by a metal ticket which hangs round his neck, searched for more carriers, and we soon had the caravan of seventy-five boys completed. The capito kept strict watch in case of desertion, using a jambok, a pliable stick of hide, when punishment was necessary. This gave me a good proof that the natives must be treated with strictness and occasional punishment if they are to make good servants.

Things now went smoothly, and we directed our steps to the custom office at Kapailo, where the custom formalities of which Governor Wangerme had informed me were complied with.

The road on the way was in many parts under water, but there was little change in the appearance of the country. Sometimes it was a little more open than usual, resembling park glades. Kapailo is a well-arranged village with tidy and clean huts. About 400 yards from the village are two travellers' shelters in excellent condition. Six miles farther, in a north-

easterly direction, we arrived at the banks of the Luapula River, where the official station Kapailo was situated. I was received with the kindest hospitality. This station (all official stations are called Boma in the Congo) is prettily situated on the wooded and grassy plains of the river, although near the swampy shore. The Luapula has a width of about 500 yards, and on its eastern side is the English trading station of Madona in East Rhodesia. An active commerce is concentrated here. I visited Madona and spent some pleasant hours with the British officials and traders, and at a well-stocked store belonging to the African Lakes Company I was able to purchase several necessary articles.

At Kapailo I made preparation to send half of my equipment direct north, while I marched with half the carriers and some things for immediate necessities towards the interesting Kundelungu Mountains.

Fish abound in the Luapula River and are caught by the natives, who sell them to various kraals and stations. A little incident showing how the natives steal openly among themselves happened on the way from the village Kapailo to the river. A number of boys came along carrying dried smoked fish in baskets. My carriers immediately surrounded them and began to relieve them of their wares without scruple or apology. A general fight ensued and I had to inter-

vene. Such incidents are of frequent occurrence, and loss of life is not uncommon.

Hippopotami and crocodiles are numerous in the river, which forms the boundary of the Congo and North-East Rhodesia, and flows from Lake Bangweolo into the Lake Moero. Its current is not strong, and it descends in a series of rapids. The altitude is fairly high, varying between 3000 and 4000 feet. The country around would be healthier were it not for the swamps skirting the river. The banks slope gently. The tree growth near the banks is not so abundant as one would expect near such a large volume of water. The tributaries of the Luapula are rapid streams, and in their descent from the western higher elevations have cut deep channels and formed clefts with sudden curves and banks steep and well defined.

The vegetation on these banks is in marked contrast to that of the Rhodesian rivers. Large trees with a dense creeping undergrowth, shading the waters on both sides, introduce the traveller to a vegetation approaching the tropical. Otherwise the country does not alter in character from that passed through in Rhodesia.

IV

THE KUNDELUNGU MOUNTAINS

ON the 8th of March I started again and travelled direct westwards. The country was very wooded; we could see no distance ahead. We crossed a broad wooden bridge over the Lufutisa River, and reached a drier and more open region, whence the crests of the Kundelungu Mountains could occasionally be seen. Taking a road, or rather native footpath, not much used, we came to the native village of Kapema. There was great commotion and excitement among the capitois, the induna, and other natives, on account of some stealing, and a general fight ensued for about twenty minutes, when peace came as unexpectedly as it had been broken. The disturbance decided me not to camp here, but to extend the march to the next village, Kasomene, so that we covered that day twenty-five miles altogether. I would have stopped on the road because some of the carriers were very tired, but most of the goods, including the tent, had gone on ahead, so there was no alternative but to continue.

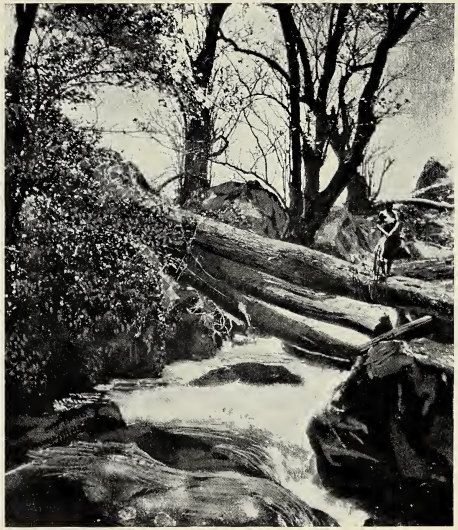
In crossing the Lufutisa River again I was carried by one of the natives, and after ascending a little hill

I found myself in a very pretty and well laid-out village, the huts lining an avenue of large-leaved trees, the whole forming a pleasant contrast to the straggling and dirty habitations I had left behind. The walls of the huts were plashed with red mud and neatly thatched. It was easy to see that I had come among a new tribe of natives. Food was provided with willingness and without stint, and my carriers ate to their hearts' content.

From this point the country was more interesting. Rolling downs with wide open spaces revealed magnificent views of the tree-clad hills of the Kundelungu range. The trees became bigger and the undergrowth less bushy. We crossed several small streams, where high grass waved on the banks, and at last reached the Chipalagi River, with a bridge broken and extending only half-way across, where a half-submerged tree-trunk lent its assistance for the rest of the way.

Ten minutes of stiff climbing brought us to the first rise of the Kundelungu Mountains. Camp was formed in a pretty spot commanding a view of the country we had passed. This was the first extensive view since we started the march. The tsetse fly had disappeared, much to our relief.

The next morning we made another steep ascent. The straight path led upwards at an angle of thirty-five degrees, and brought us to the altitude of 5000 feet,



TREE TRUNK LYING ACROSS THE CHIPALAGI RIVER

By means of which we crossed to the other side

NORTHERN SPURS OF KUNDELUNGU

Which I crossed on my way to Lake Moero

KUNDELUNGU MOUNTAIN SCENE AND WATERFALL, 1500 FEET

at which elevation the mountain formed a large, undulating plain.

We first crossed a small, swampy vlei, bright with flowers and the short grass usual in these high altitudes, then a streamlet of clear running water splashing over rocky boulders, and so over small ridges, and again several rivulets all flowing to the south-east. This carried us to the base of another steep but short incline, which we climbed and found ourselves on a long ridge which loses itself in the valley to the south-east. The ground was now very rocky, with many torrents, some descending to the east towards the Luapula, and some to the west to the great Kafila River. From here we descended to the great Kafila Valley.

Two days were spent in crossing the Kundelungu Mountains, and it was a pleasant change to walk on hilly and more open country, after the flat and bushy plains behind us, where the view had been always restricted.

At these high altitudes the vegetation differs considerably from that in the valley. Short grass with a thick sprinkling of flowers covered the summits. The ravines and watercourses were overgrown with short, thick shrubs of varied hues of green. The entire mountain sides are sentinelled with large trees. It is evident that the southern slopes of the mountains had in recent geological times a higher elevation, and

were connected with the distant but clearly distinguished table-shaped summits to the north. In various places were seen blocks of stratified sandstone large enough to indicate that they were fragments of the tableland.

My intention was to walk along this Kafila Valley below the steep western face of this great Kundelungu mountain group, and then to cross it again at its northern extremity. In this valley I passed the villages of Binga Mombeta, Mulenga, and Kienga, and after a journey of fifty miles came to the head station Lakafu.

The road was always winding, sometimes close to the precipices of the mountains and sometimes nearer to the Kafila River. As our altitude was here considerably below 3500 feet, the heat was more oppressive. The natural scenery provided many pictures of impressive grandeur. Numerous streams from the mountains crossed my path, and the table-shaped heights seamed with ravines gave birth to many torrents that descended as picturesque rapids and cascades. The march was full of interest, and, as we journeyed, several mountain groups to the east rose in bold outline against the horizon, and the green patches of cultivated land gave rich evidence of the bounty of the soil. The many native villages in the vicinity of my path were thickly populated, especially in the sheltered clefts of the mountains.

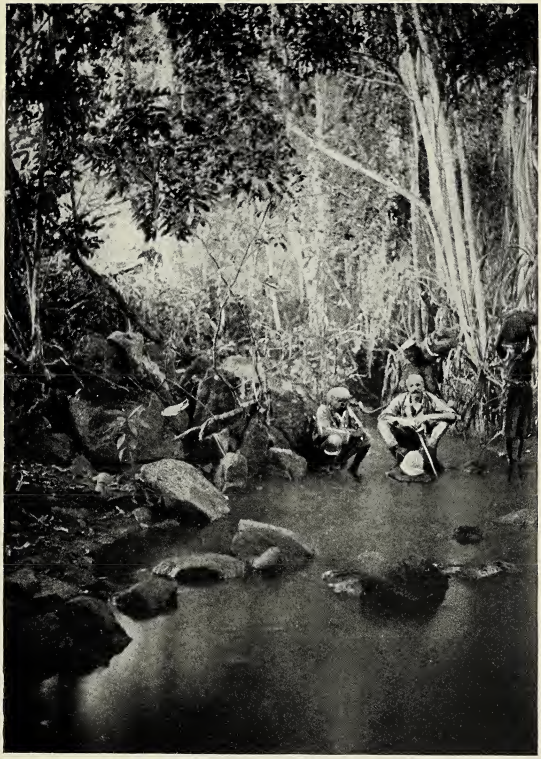
The mountains form a barrier beyond which the negroes never trespass. None had ever attempted to scale their rugged sides, rising a thousand feet above the valley, and still less did they seek the mountain heights for places of residence. In many places swamps and morasses often two miles wide surround the streams, making marching heavy and arduous, but fortunately rain had not fallen for some days, otherwise these tracts would have been almost impassable. The footprints of game could be seen everywhere, but as I was anxious to push on I did not look for sport. In general the valley is flat near the river, and undulating nearer to the mountain, covered with low bush, but not thick enough to hide the ever-changing views on both sides.

Approaching the station of Lakafu, which lies at the foot of the steep face of the Kundelungu, the traveller enters a broad, well-kept road planted with trees on each side, through the quarters of the native soldiers or Askaries. These quarters form two lines of neat, square mud huts regularly arranged. Across a well-made bamboo bridge spanning the Lukafu River the European quarters are reached. The bridge leads straight to a pretty courtyard, where varieties of palm, banana, citron, and other trees afford an abundant shade. Around this court are the official buildings, the magistrate's court, the Governor's residence, general office, and the quarters of the various

officials. These are all built of red brick, with neat white painting and white verandahs supported by square brick columns. From the courtyard well-tended avenues lead in all directions, and the whole atmosphere of the place indicates its importance. One avenue leads to the road over the Kundelungu Mountains to Lake Moero, another to the copper mines of Kambove in the south, and another to the head station at Lukonzolwa on Lake Moero. In the soldiers' quarters order and neatness prevail. Tables, chairs, and the good clothing of both men and women give evidence of prosperity. Many of the mud walls were ornamented by native drawings of some merit.

The garrison is composed of 150 barefooted black soldiers under the charge of a Belgian officer. The uniform is a blue tunic and knickers with a red fez and sash. The soldiers carry well-polished Snider rifles, and presented a fine appearance at a review I witnessed. The bugle-calls especially were well given.

I was hospitably received in Lakafu and invited to lunch with the representative and staff on the day of my arrival. To eat with the table appointments of civilisation and be served smartly by a negro waiter in an old dress-coat was a grateful change after the rough-and-ready habits of veldt life. I tasted fresh butter for the first time for months, and a good cigar at the



BAMBOO GROWTH ON THE RIVER LOUISA

A HUT OF THE WABEMBE TRIBE
With native drawings

close of the meal put me at peace with all the world and made even the troubles of transport through the wilds seem less irritating.

The natives of this the west side of Kundelungu seemed prosperous and contented. This condition was specially marked at the next large village, Mwenda. Curiously, although these villages lie low, the tsetse fly is not found, and cattle and sheep are rather numerous. But not far to the west of the River Lufira the insect makes cattle life impossible.

At Lakafu food was somewhat dearer, as was also imported merchandise. After my personal boys, when sent to several villages to purchase food, returned with the tale that the black inhabitants declined to take our English calico as payment and would have no dealing with us, I had to buy a store of the better material which is generally used as a medium of exchange in the Congo.

Five miles from the post of Lakafu there is a magnificent waterfall, where a good-sized stream from the mountain has a sheer drop of about 1200 feet. The road thither skirts the edge of the River Kibachi, where the scenery is very pretty, but where the traveller must face a great deal of hard climbing. Nearing the fall, we had to negotiate many miniature rapids, big boulders, narrow precipices, and stretches of tangled bush. The walls of the gorge get steeper and narrower. Close to the fall a buttress of the precipice

bars the way of the river, causing it to swirl in a half-circle. Then we entered a small rain forest, and finally stood below the cataract, where the blinding spray permitted only an occasional glimpse of its grandeur.

On the 21st of March the carriers, procured for me by the kindness of the Congo officials at Lakafu, were ready to start, and with new courage the march was resumed. My purpose was to travel towards Lake Moero, and from this station three roads led thither. One proceeds by a very steep path over the Kundelungu Mountains due east, another crosses the mountains to the north-east by an easier gradient, and the third, which I selected, was a native path passing along the base of the western face of Kundelungu and crossing it at the northern extremity. By following this route I travelled a less-known region, about which I could obtain little information. About seven miles from my start I arrived at the village of Mwenda, and found the biggest gathering of natives I had seen since I left Broken Hill. A main road 3000 yards long leads through the kraal, both sides of it being lined with neat straw huts, some of them round and others square. Other roads lead to the right and left at right angles and make regular squares. The huts of some of the more important negroes are surrounded with hedges of a kind of euphorbia plant. There are several open spaces used

as collecting-places for the cattle on their return from grazing, and there each native selects his own beasts. Here also the cows and goats are milked, and other work relating to the herds performed; while all around pigs, goats, fowls, dogs, and cats complete the picture and contribute to the noise. Even a lion cub about as large as a St. Bernard dog was fastened by a chain in one corner, and seemed to be quite tame and playful.

The new carriers were excellent, and that day we marched much farther than originally intended. It rained in torrents during the whole of the afternoon, and we were thoroughly drenched to the skin when we arrived late at Kasomena, our camping-place. The chief was very hospitable and offered me the use of his square, roomy kya, where a fire was burning, and I was glad to accept his hospitality as I waited for the rest of the loads before I could change my wet clothes.

It was obvious that the natives were of a higher type than usual, for the chief politely kept away all inquisitive intruders while I made use of his hut. When the carriers arrived the tent was pitched, and an abundance of food was brought to me for purchase.

Up to this point the road had lain mostly through plains and along the courses of streams. Many swamps swollen with rain had made the march arduous, but at Kasomena we neared the mountain walls again, because further north the valley is almost one continuous

swamp between the tributaries of the Lufira River. The hills to the west which hemmed in our valley from Mulenga were left behind, and a huge plain stretched in front, with distant mountains looming darkly against the blue sky. Leaving this friendly chief on the morrow after our arrival at his kraal, we soon reached the tributaries of the Lofoi River, which flows into the Lufira. Here the regular face of the Kundelungu plateau is broken, and these streams, which widen into many dangerous swamps, stretch far into the heart of the mountain range. In skirting the base to avoid these swamps sometimes a whole day was lost, and I frequently found that after a hard day's march I was only a mile farther north and exactly opposite the point of the morning's start. Few native kraals were passed, and these had only few huts. Generally in these isolated places the natives bolted just before our arrival, but took courage and appeared after a while. At the foot of these mountains, stones and boulders lie in rugged profusion, varied with patches of sand and gravel and a very scraggy bush, mostly mimosa. The valley is covered with grass from eight to ten feet high, which does not permit the growth of any flowers. On the Lofoi River—a large river lined with big trees—the tsetse fly made its appearance, so that cattle, which were so plentiful during our recent marches, were no longer seen. The tsetse belt which stretches south and north along the

NATIVE SOLDIERS' QUARTERS AT LAKAFU

BRIDGE OF CREEPERS OVER LUFUKO RIVER

Lufira River seems to have its boundary here. The insect found here is not only fatal to animals, but it is also the species which carries the sleeping-sickness germs. The distribution of the fly is very remarkable, in some parts one side of the valley is infested, while the other side with no observable difference is entirely free. There are two varieties : the *Glossina morsitan*, which is found in the sparsely wooded parts, is the species that conveys a fatal disease to animals, and the *Glossina palparis* is found in the neighbourhood of water and spreads the deadly sleeping-sickness. I shall refer to this subject later when my journey gave me more opportunity for observation.

Heavy rains fell every day now, and the roads were often so bad that only very short marches could be accomplished. Streams became much less numerous than formerly. The mountain face appeared more unbroken again, and the country generally was very pretty. Our camp at the village of Monswa lay in a picturesque spot on the slope of a hill-side fringed with trees, and with the high mountain peaks forming an impressive background. When we resumed our march high grass overgrew the path and shut out the view of the surrounding country. Pushing the way through this was especially tiring and difficult for the leader of the caravan. The long growth concealed unexpected swamps. Few villages were passed, and no goats or other domestic animals were

visible, a sure indication of the presence of the tsetse fly. It is remarkable that mosquitoes had given us little trouble so far. A few days more of weary marching through this high and generally wet grass brought us to the jutting slopes of the mountains again, and there thick bush covered undulating country varied by open rocky spaces with finer grass. The natives have avoided the plains and selected the slopes beside the streams as sites for their huts. The mountain sides here are generally very precipitous, with red sandstone crowns edging the plateau. The slopes of the mountains in this part were exceptionally dry, and many trees were brown and autumnal looking; yet several waterfalls could be seen on the face of the hills in the distance.

The heat of the last few days of the journey was more intense than I had experienced so far, the thermometer registering 88 to 90 degrees in the shade at noon.

From the village of Kashiopa the vegetation became much greener, and every now and then we came upon patches of trees with a very rich undergrowth. This small village is situated under the brow of the mountain, and a fine cascade of the Lupungwa River descends near it from the tablelands above.

The kind and hospitable chief brought me all the good things he could think of—eggs, wild tomatoes,

very sweet and luscious, growing abundantly around the kraal, fowls, and bananas, and did all in his power to make my stay pleasant.

After leaving this village the way led over a plain of jungle grass and up a gradual slope of the mountain side, which again was broken and broached by deep ravines covered with dense forest growth, but lacking in water. Traversing very hilly country, we reached the village of Pakilia late in the evening. Here the chief was a woman, and a business-like one too. She ordered food to be brought to my camp, and the natives obeyed promptly. Wild cotton was growing profusely around and there were numerous palm trees.

Much rugged country lay before us, and up and down, through ravines, many of which were without water, our path led down the hills to a great wooded plain, which we had already seen spread out before us from the high land above. We were able to follow a nicely cleared road, which allowed us to march along at a good rate, and to reach the Mafungwa village by a bamboo bridge over the Luishi River. Bamboo growth occurs everywhere in this neighbourhood in ground near water on the mountain slopes, and the natives put it to many uses. Before coming to the bridge the induna Mafungwa, some lesser chiefs, and most of the villagers came out to meet us. They greeted us by

a simple salute probably copied from Europeans; then, turning back, they accompanied me solemnly and silently to a place they had selected for my camp. Their chief held sway over a wide area, several chiefs being under him, and he seemed conscious of his position, for his bearing was most dignified and important.

I hoped to cross the Kundelungu Mountains from here so as to be able to reach Lake Moero. To carry out this plan I had to obtain four days' supply of food and a greater number of carriers to transport it, but I found out that the whole inhabitants as well as my carriers were strongly opposed to the arrangement, either from fear of travelling an unknown path or because the chief held this to be sacred or haunted ground. As all persuasion was fruitless, I made investigations and found that a footpath led straight up a steep incline. I found on descending again that a few boys were at last willing to accompany me, but immediately they hung their heads again, an indication that they would leave me on the plateau if I risked crossing it, so I reluctantly abandoned my plan of cutting a new path over the mountain.

The natives told me then that about four days ahead at Kibanda a path led across the mountain to Lukonzolwa, and I decided to follow this route. The natives at this kraal are peculiar in that they

allow their hair to grow long and indulge in fantastic curls. They are hospitable in disposition.

Passing several small and scattered villages, we arrived in a few days at Kibanda, through pretty woodland scenery, and found the path of which the negroes had spoken. Before leaving this western side of the Kundelungu Mountains, which serve as a boundary between the native tribes, I may say something about these friendly negroes. They are well built, willing, and good-natured. They are not nearly so impudent as those in the lower South-East Congo, but are cleaner in person and more reliable and honest. I noticed that when a carrier was tired a native from a village was always ready to help him. These negroes are troubled greatly by an insect called the "chigger," or sand-flea, which attacks the feet. This little parasite is so small as to be hardly perceptible. Finding a host, it bores through the skin, generally under the toes, but occasionally finds its way to other parts of the body. It deposits its eggs, suppuration begins, and if neglected much pain and suffering follow. The natives are great sufferers from this pest, but are very clever in extracting the larvæ with a sharp thorn or pin. Food was everywhere exceptionally cheap. On the whole this tribe is very industrious, sowing broad lands with mealies, sweet potatoes, sugar-cane, arrowroot, tomatoes, bananas, onions, and occasionally European potatoes,

and tobacco of good quality. The custom of greeting differed somewhat as we got northwards. In some cases the women line the road as the stranger enters the village, singing and shouting the chorus "Ay-Ayah," while one of the women keeps up a shrill cry or screech. In the south the salute is more in accordance with European etiquette. Among themselves a peculiar handshake is customary. On meeting they shake each other's hand in the usual European manner, then they twist the hands and grasp the thumb in the palm of the hand. The subjects greet their chiefs by clapping their hands. Their villages are tidy and regularly laid out, and even the smallest has a square or kind of market-place in the centre.

The valley which we had been traversing for three weeks is enclosed by the great Kundelungu Mountains, where from the plateau edge it drops sheer down in a precipice of 1500 feet. On the southern half of this table-mountain the face is regular and unbroken, while towards the north great and rugged capes jut out, and ravines and valleys bore far into its heart. Water is often scarce or confined to large rivers. In the north numerous small courses lay dry, while in the south water is more evenly distributed by many streams. The climate, although very hot, cannot be called unhealthy. The midday temperature seldom exceeds 85 degrees Fahrenheit, and the average morn-

ing and evening registers about 65 degrees. The days were invariably cloudy, and I seldom saw the clear blue sky of South Africa. Heavy dews fell at night, and the rain came generally about three o'clock or during the night, accompanied by thunder. Thus travelling can be arranged with regularity. The tracks of game and wild beasts were frequent, but the animals were seldom seen, on account of the jungle grass. Hyænas are common and particularly audacious, but lions were not heard of on the whole western side of the mountains. Guinea-fowls, partridges, and bush pheasants were plentiful, and in the neighbourhood of the rivers a spur-winged goose is common, and may often be seen roosting on trees.

On April 4th we left this valley and climbed up the Kundelungu mountains. After a pleasant uphill walk for about six miles we camped at the source of a small stream. We were now 1020 feet above the valley. The slopes were not very thickly wooded, yet only occasionally a glimpse of the valley below was obtained, and the climbing was comparatively easy.

The grass was short; small ant-heaps were numerous all around, but none were of the giant size of those in North-West Rhodesia and South-East Congo, and very few ants were noticed crossing our path in armies, as had been the case farther south. We passed no villages for some days, and my carriers were very quick and expert in building huts at each camping-

place by cutting off large sheets of bark and making thereby a waterproof roof. Crossing first a series of flat ridges, we mounted the high plain of the plateau, which we took two days to cross. Gradually descending over mountain ranges, we came to Lukonzolwa, on Lake Moero, six days later. This plateau is the extreme northern end of the great Kundelungu Table, and the rivers descend on all sides. The ridges we first traversed were the spurs which accompany the rivers flowing towards the large Kafila River, in whose neighbourhood we had been since leaving Lakafu, and the ridges to the north and east are those which lie between the rivers flowing to Lake Moero. All this elevated country is healthy, and the freshness of the air recalls the high veldt in the Transvaal. The soil is fertile and the vegetation luxuriant. Large herds of cattle, sheep, and goats could fatten here, as the tsetse fly and mosquito are entirely absent. I had no occasion to use my mosquito-net while camping in these healthy regions. The high and undulating country crossed was alternately sparsely and thickly wooded, and we experienced more rain than in the valleys, the showers being more frequent. Under large trees the earth is generally covered with soft, thick moss. On the sunny slopes were many herds of wild pigs, which on the approach of the caravan disappeared into the rocky and wooded ravines. The march through this healthy country was pleasant and

interesting—along edges of precipitous ravines, over ridges, through well-watered valleys, always higher until the plateau was gained. There were few villages, and these few were in the valleys leading to the lower lands.

The cultivated patches of the natives bore evidence to the extreme fertility of the soil and indicated possibilities of the country. It is rather surprising that no natives live on this healthy Kundelungu plateau and that the best land lies idle. The vast area is suitable for European settlers, and agriculture, sheep and cattle farming could be developed successfully, especially under a Government scheme of settlement.

The flora is varied—euphorbia, protea, erica, gladiolus, and everywhere bright, short flowers enliven the landscape. The grass is about two feet high, but keeps its moisture a long time, and we had to march mostly in wet ground. The temperature went down as low as 50 degrees in the morning and evening, and the climate is bracing and healthy. About twenty miles before reaching Lukonzolwa we entered a wide waterless valley with many ant-heaps; it separates a smaller plateau from the great Kundelungu mountain group. This plateau, which narrows to a ridge east and west, forms the western mountain chain of Lake Moero, and from there the country makes a precipitous rocky descent of about 300 feet to the level of the first terrace of the lake. On this

plateau the tsetse fly reappeared in great numbers, and rendered marching through the woods almost unbearable. Near the post of Lukonzolwa the natives were numerous, and much acreage was under cultivation. A network of streams flows towards the lake and supplies an excellent natural irrigation. The station itself is large, though somewhat straggling, and is situated on the crest of a terrace which abruptly descends to the lake level. The official and native soldiers' quarters are all situated on this hill-plain immediately overlooking the lake, and built in similar style to those at Lakafu. From the verandah of the guest-house placed at our disposal fine views were obtained.

To the north hills sparsely covered with trees precipitously descend to the lake, and to the east the fine expanse of water twenty-five miles across stretches to the Rhodesian border, backed by a rugged and high range of mountains. To the south on both sides of the lake the mountains fade away till in the south-east nothing but water bounds the view. As my carriers from Lakafu had to be sent back, I stayed here several days to procure fresh ones, and as there was a Scotch mission station at Loanza near by, whose head seemed to have the natives well under control, I applied to him for help. The missionary was very hospitable, and gave me much interesting information about the natives, their customs, and the

general conditions of the Congo. He was very energetic, and carried on his missionary work with much practical common sense, teaching the people not only to pray, but also to build decent huts, to give some attention to personal cleanliness, and to work. The effect of this teaching was pronounced. Cattle, sheep, and goats thrive well in great numbers, and the tsetse fly seems not to extend to this district. From the station situated on this terrace grand views were obtained of Lake Moero and its surroundings.

V

LAKE MOERO, LUFONZO, AND LUFUKO RIVER TO THE SHORES OF TANGANYIKA

FROM the station I had reached we had a clear prospect of Lake Moero, or Mweru, as it is sometimes called. The reader who wishes to identify the lake on the map will find it about 90 miles south-west of Lake Tanganyika. Lake Moero is 76 miles long and 25 miles broad. The great river of Central Africa flows through it—the Luapula or Upper Congo. Seen from a distance it showed borders of heavy swamps, which we found on nearer inspection to yield generous crops of bananas, sugar-cane, and rice. Indeed, all vegetables grew well around the borders of the lake. The roads by the side are very little used, the waterway of the lake itself forming a much more serviceable and economical means of transport. A small steam launch plies backwards and forwards and serves the several points of traffic.

My journey lay towards the lake and was resumed after a few days, when my new carriers had been collected. The road led us northward through high grass-land, where native villages were thickly set.

THE JUNCTION OF THE LUALABA RIVER
AND LAKE MOERO

MY CARAVAN ON THE MARCH

SHORES OF LAKE MOERO

With steam-launch on the water

There are numerous streams, which, as they seek the lake, break the continuous face of the hill front that towers over the water.

As we progressed, the grass-plain became hemmed in by mountains of irregular contour, and on the second day of our march we entered a seemingly interminable valley, where the grass was long and wet, and the ground sodden with sloughs sometimes two or three feet deep. Then we pressed eastward, always towards the lake, mounted a narrow rocky mountain spur, and descended to the River Luapula, across which the caravan was transported in boats cut from hollowed tree-trunks, which plied backwards and forwards until the whole personnel and equipment had been carried to the other side.

Very soon after our crossing we arrived at another post station called Pweto, on the northern extremity of Lake Moero. The place is prettily situated and newly planted with trees of various kinds, but heavy rains had seamed the ground with dongas or deep ruts. From the official quarters a fine view of the lake and the River Luapula is obtained. Numerous headlands jut out into the lake, marking sheltered bays where native villages nestle, and where the cultivated fields of an industrious population chequer the slopes when viewed from the opposite heights. The sheet of water is so large that it cannot be surveyed as a whole. The horizon of water and sometimes of

purple mountain shelves faintly looming up in the far distance increases the semblance to a seashore. The station of Pweto was the first where I found Congo postage stamps in use. Correspondence from the districts I had already crossed reaches the outer world by way of Rhodesia, but from this point the mail is conveyed to the ocean by the rivers Luapula and Congo.

Carriers were plentiful and I was able to press forward without delay. The path rose gradually and for forty-four miles we wound along a great valley lined with distant mountain ranges. Then when the hills closed in and Mount Miambe blocked our way we had to cross it. The track we followed was grass-grown to a height of five feet; it was little used, and in places was very rough and sandy. Occasional patches were, however, lawn-like in their flatness and smoothness. The valley is populated thickly near the lake, but we passed few villages afterwards.

The second day saw us in a large swamp, through which we had to wade for a whole day up to the knees, sometimes falling unexpectedly into deeper hollows. For some miles a stream had chosen our path for its bed, while in other parts pools, sometimes three feet deep, lay across our road; but marching thus was preferable to labouring through the black, sticky clay on the sides. As we left this valley and the terrible tsetse fly, the regular mountain chain became very much

broken, indicating a great earth disturbance from east to west. The journey became intensely interesting as we proceeded, and after climbing over Mount M'Tamba a stony path led down to the broad valley of the Lufonzo, a river which flows westwards into the Luapula. A numerous native population is settled in this valley. On its slopes are many villages, of which Kisabi is the largest. The fertility was exceptional, and the fresh green and strong growth in all the cultivated patches was remarkable both in quantity and quality. The trees, however, were few. Towards the west the valley widens very much as it descends. The Lufonzo is a wide, rapid river, and high bamboo reeds are thick along the edge and even in the middle of its bed in many places. Inundations are frequent ; the thick and muddy waters flow over the flat banks during heavy rains, fertilising wide tracts.

The natives from Lake Moero to this point belong to the Wabembe tribe. Their villages are usually small and straggling. They cannot be described as lazy, although the cultivated patches seen on the west of Kundelungu are not reproduced here. The huts are of the same shape as those seen before, but they are more untidy both individually and collectively.

On the north-east of this river a great mountain chain forms the shed of the waters running to Lake Tanganyika and the Congo River, and this was the direction I had resolved to follow. After cresting a

stony hill, we came upon a very rough and forested gully leading sharply to the top of the first mountain on the southern side of the range, and from there I skirted Mount Luvangu. No water was found throughout the entire day, and after a march of twelve miles we reached the hamlet of Siabi, which belongs to the tribe of the Warungus. We made camp just in time, for as soon as the tent was stretched we had our afternoon shower.

From here a network of streams flows to the Lufonzo River. From this lofty elevation we could see a broad valley spread beneath us, and to the north-east a still higher belt of mountains running from north-north-east to south-south-west. We ascended to these table-uplands after crossing the valley and threaded our way along for about three days on the highest parts, and after forty-eight miles of marching we reached Mount Molumbwe. On these elevated plains, even at this great height of 5000 feet, the tracks of elephants were frequently met. Grass was trodden down, and many tree-branches torn from their parent trunks lay around.

The face of this forbidding table-mountain was too steep to descend, and we had to make our way down to the Lukifwa River, which runs through a large valley along the base of this extensive mountain and empties into the Lufonzo. On the way great difficulties were experienced in crossing the vleis and small

streams. Numerous watercourses on both slopes of the valley had to be negotiated, and although they did not hold much water, each formed a large swamp. In crossing some of them we managed sometimes to reach the other side dry-foot by stepping on big bunches of old grass and reed roots, which must have been of very ancient growth to have formed such hard stumps. If we missed a footing, however, we sank knee-deep in the black mud all around. In other places we would come unexpectedly to a watercourse covered with rushes, and fall up to the armpits in the running water underneath before we quite knew what had overtaken us. The march was hard. Undulations with fine long grass would hide treacherous rocks upon which we were often precipitated unexpectedly in a nasty fall, and extensive swamps were thickly set with rushes, which cut deeply into the flesh as we pressed through them. Then heavy wading through the black and sticky mud left us at the end of the march weary and exhausted. There were some respites from such difficulties in occasional patches of fine agricultural land on the slopes, but few natives live here on account of these laborious approaches, and I passed through several abandoned villages. The rivulets or spruits on the mountain showed patches of mimosa trees with flat crowns. This was a peculiar characteristic of the valley, which otherwise was entirely devoid of tree growth.

On the following day it was a relief to climb the mountains again, and at last the shed of the Tanganyika waters was crossed at Mount Giambe. Camp was made in the great Lufuko Valley at the base of the mountain. The Lufuko River is about 100 feet across and winds through rugged gorges northwards to Tanganyika Lake. I chose to follow this valley in order to reach the great inland sea. After six miles' marching and at an altitude of 4700 feet we entered a cluster of thickly populated villages, and finally reached the river, with its flat, sandy banks covered with bamboo reeds. We had to cross the river, and on the other side numerous hillocks of varying heights and shape line the valley. Following the river, our road lay down these heights, past villages and patches of cultivated lands, masses of boulders, rugged cliffs, morasses, and numerous streams, always descending gradually to the north. The valley is bounded both right and left by imposing and rugged mountain chains, rising menacingly against the horizon.

It was very difficult to make the Warungu natives understand us, as the language is very different from those further south. Every fortnight we seem to encounter a new tribe. Although Swaheli is a most useful language in many out-of-the-way places, it is of no use where we now were. An article has often in the course of a few weeks three or four different names, and even by marking every name in a note-

book it was difficult to convey the meaning with such an ever-changing vocabulary. It was my practice to speak by signs, showing articles to the natives and noting at once the native word in my note-book. This helped me considerably. The natives looked upon this practice as a great joke, but soon understood what I wanted. They betrayed great surprise when I repeated the words to them afterwards.

After a march of a few days we entered a narrow pass, through which the river had cut its way, and the mountains Kisei, Lusanka, Kalume, and Kifinkwa raised their frowning crests above us. For about sixteen miles the country was most impressively wild and rugged. The sullen heights were cleft into deep chasm-like rifts and wild ravines all gloomy and impenetrable, showing great earth disturbances in the formation of the contour.

The natives here are very shy and always hid themselves at our approach. Those living in the open valley, on the other hand, met us openly and with the usual welcome. Towards sundown we came to a broad valley of soft grass and beautiful flowers, where flowed the Lufuko River, shining like a ribbon of silver in the glorious sunset and fringed with dark verdure. On the far side a rolling expanse of bush veldt framed a glowing picture of great natural beauty. The population was denser than I had ever seen before, and the cultivation more thorough and extensive.

These Warungu natives were extremely friendly and hospitable, providing abundance of food for my company. When we were quite a distance away and before we could even discern the village, the chiefs with their head-men and followers would come to meet my caravan and escort us back to the village, the crowd always swelling as we proceeded. About a mile from the village the wives of the sultan with other women lined the road and greeted us by shrill screaming. The huts of this tribe are circular in shape but exhibit no special differences from those already passed, and the villages are rather untidy and straggling.

In order to avoid following a great bend in the River Lufuko, I took a straight course through the bushy plain and rejoined the river, whose course had considerably lowered. Along its banks we found our old enemy the tsetse fly, but strange to say, after the river had been crossed it was found to have disappeared.

We visited a Roman Catholic mission station called Lusaka, a bright oasis of civilisation in the wilds. The industrious fathers have cultivated a large area of land, planted with many varieties of vegetables and fruits, including lemons, bananas, coffee, oil palms, oranges, tobacco, rice, and cereals. They have built large brick houses round a wide square, and in these many black orphans are taught and fed. A church was being constructed, and the natives were preparing

MOUNTAIN SCENERY WEST OF TANGANYIKA

SCENERY ON THE MUGILA MOUNTAIN

THE MOUNTAIN CHAIN

By which I descended to the shores of Tanganyika

the building material. Brick-making, carpentry, and tree-felling and sawing are followed, and only glass is imported. The work accomplished here shows what can be done in a wild country by enterprise and system, and if the example were more widely followed Africa would go far to support itself with its own resources.

We left Lusaka after a day's rest, and proceeded eastwards over a belt of mountains, 6000 feet above sea-level, whence we had our first glimpse of the great expanse of Tanganyika.

On this belt we met another race of natives—the Matabwe. A steep descent led us to a plain almost on the level of the sea, and a nine-mile march brought us to Baudouinville, where I expected to find awaiting me all correspondence sent to me since my departure. It takes from four to six months for European letters and news to reach here, as there is no official connection.

Baudouinville is the Central Roman Catholic mission station, and the fathers send their own letter-carriers over German East Africa. Much good work is carried on around this post, which resembles a European village, and contains the largest church in Central Africa, which took five years to complete. There is a native population of about 5000 within a ten-mile radius.

On the shores of the lake and at its level are many

swampy plains, which are more numerous at the mouths of rivers, which as a rule do not pursue a straight course into the lake. These mouths have become silted up so as to form sand-bars, behind which the waters deflect their courses and form deltas. Away from the rivers steep and rugged mountain sides rise sheer from the water. Around the great lake, which is 2800 feet above sea-level, are terraces of mountain chains with several conspicuous summits discernible from a distance. The highest terraces sometimes form extensive plateaux, and are sometimes broken into chains and hills of decreasing altitude towards the west. The highlands with an altitude in excess of 6000 feet have a most healthy climate. Yet they are sparsely inhabited, the greatest black population being on the slopes of the terraces descending to Tanganyika, where the natives are industrious agriculturists, and own many herds of cattle, sheep, and goats. They have many tree-trunk boats, and some pass their time fishing and selling their catches to their fellows on the heights. Others trade with the natives farther inland, and exchange products such as palm oil, monkey-nuts, rubber, copper, and iron with their neighbours on the eastern side of the lake in German East Africa. The tsetse fly which infests the shores of Tanganyika carries the germs of the sleeping-sickness, and the inhabitants on these slopes, who pass much to and fro, have been decimated by this disease.

Only lately have they come to appreciate its awful ravages, and whole tribes with their chiefs have abandoned their old homes for healthier localities. Great numbers of infected negroes now live in quite healthy districts and die there. The tribe, finding its new quarters apparently no better than the old, departs again for other regions, and thus the native tribes are becoming much intermixed. The movement of these health-seeking natives is generally to the south and to the east. Whether or not they carry the sleeping-sickness to their brothers is a problem which has not been satisfactorily settled.

At Baudouinville there is a camp where I first saw patients affected with sleeping-sickness. They were negroes who had come here from other parts. In the neighbourhood of this mission station the tsetse fly is common, but it is remarkable that on the hill and in the vicinity of the station itself the fathers keep hundreds of cattle in good condition. At M'Pala, the branch station of this mission, thousands of negroes have succumbed to the disease, and the place was so much infected that it was intended to abandon it.

After a halt of several days in Baudouinville in order to pack my collection for transport northwards by a small native boat on the lake to M'Toa, I resumed the march with renewed energy and pushed forward to the west, to the beautiful country round

the Mugila Mountains. Leaving behind the great inland sea, I crossed a granite plain towards Mount Marumbi, whose heights stood out sharp and isolated from the chain proper.

We camped in the evening at the foot of this mountain, and next morning at sunrise commenced the ascent. Making our way along the banks of the Moba River, we crossed a long sweep of high grass, where the ascent became suddenly steep, and led over masses of pebbles and jagged rocks interspersed with thorn bushes. Here the tsetse fly hovered in myriads, and charged our little party as if they resented intrusion in their domain. However, as we were rapidly ascending, although with great labour over the slippery stones, we soon got beyond their range. We climbed a kloof on all fours, to continue the way over rugged masses of cliffs, piled one on top of the other. After a strenuous effort we reached the craggy crest of the mountain, and traversing a short grassy plain with ease, we mounted a small kopje hill forming the crown of the summit at a height of 6700 feet. On this plain, which was of oblong shape, game abounded, and large herds of zebra were grazing on the slopes of the south-western side. The view from this perch was one of rare grandeur and beauty, and we could see spread like a carpet thousands of feet below us the country that I wished to explore. Vegetation is thin and stunted

MOUNT MARUMBI

MOUNT SENGA

THE MISSION STATION, BAUDOUINVILLE

round the face of the mountain, but nearer the plains the verdure testifies to more than average fertility.

An interesting ramble on this mountain made the day pass all too quickly, and I had to hasten back in order to regain camp before darkness fell. In crossing the belt of the tsetse fly the roaring of the lions in the twilight gave me some little concern, and I was glad when I rejoined my party without further adventure. But danger was not yet over. We were in the long grass, and to make camp there for the night would have been to invite the attention of lions, whom we heard, but could not see. We hurried forward, hoping to come to a clearing. We soon became aware that some animals were keeping pace with us, but remaining concealed among the long grass. The "boys" became anxious as darkness began to fall, and we expected an attack at any moment. The lions became bolder, and did not hesitate to show themselves. We could see them bounding along parallel with our line of hurried march. To our intense relief, we reached a clearing near a village just before it was quite dark, and we were safe. We made camp, lighted our fires, and the lions remained in their grass haunts. We heard them roar their disappointment.

It was my intention to proceed westwards over the first mountain range, called Nunda. A very rough climb over huge boulders of stratified sand-

stone, shifted and disturbed in all directions, showing signs of great earth movements, brought us to the M'Lobosi Valley, a broad, undulating plain of limestone. Bordering the valley to the west rose the towering peaks of Katemo, Kava, Kafamba, Kisala, Kabundu, and Senga (6500 feet), which extend from the highest parallel chain of the Tanganyika watershed. The regular geological structure tempted me to follow it directly north for twenty miles. Not far below the pointed summits a narrow plain stretches westwards at an altitude of 6000 feet, and slopes away to the Lufuko River, which it supplies with many feeding streams. Again these healthy uplands are avoided by the natives, but in the limestone valley of M'Lobosi and the granite plain of Kabinda, whence I had come, numerous prosperous villages were scattered among well-cultivated lands covered with large herds of sheep and goats.

On the way between the Lufuko and Tanganyika we saw two native lepers walking about at large, as seems to be usual. An abrupt change from a most agreeable to a most disagreeable climate is experienced here in a single day's march along the western side of Tanganyika. The bracing air on the lofty elevations and the strong winds blowing from the lake around the peaks, where the short cropped vegetation gives an Alpine aspect, is in strong contrast to the tropical

vegetation and hot and humid air of the Tanganyika shores. My route lay due west through the valley of the Ruika River, a tributary of the Lufuko. This valley, wedged between the steep walls of Mount M'Kubwa and Mount Kabwemalwe, slopes steeply in fifteen miles down to the 3500-feet level, where the high grass again covered the rocky earth and a dense native population prosecuted a vigorous agriculture.

In the Lufuko Valley it was dangerous to walk in the footpaths without a guide, as the natives are great hunters and set many traps for large game. These traps are made by digging in the pathway a deep ditch about 2 feet wide and 6 feet long and 8 feet deep, the sides converging to a point at the bottom, where sharp assegais are planted with the points upwards. The hole is carefully covered with dried cut grass with some soil sprinkled over it. This is so neatly done that one can hardly notice any disturbance of the usual track. The animals that come along these tracks and step on this false road fall heavily upon the points of the spears, and in their struggles fall farther into the narrow bottom, where they cannot move.

VI

MUGILA MOUNTAINS AND THE CANNIBAL INHABITANTS

AND BACK AGAIN TO THE SLEEPING-SICKNESS INFECTED SHORES OF TANGANYIKA

AN interesting and cleverly constructed native bridge enabled us to cross the Lufuko River. Its constructors had selected a place where the branches of two large trees almost met in the middle of the river. To the trunks of these trees they had fastened loanen creepers, which they wove together cleverly so as to form a thick net strong enough to support a considerable weight.

The country directly west of the Lufuko consists of small hills, spurs of the Mugila Mountain group, which top one another in terraces ever higher and higher up to the high Mugila Plateau. Here we entered the territory of another tribe, the Batumbwe, who live chiefly on the eastern slopes of the Mugila Mountains.

Winding our way now through the valleys and gradually ascending for several days, we passed through cultivated lands where the maize showed such

strong growth that we could even obtain shade from it in the narrow paths. It was often very difficult to get through these extensive fields, as the roads zig-zag in many misleading directions. We seldom saw villages or huts, and learned that the homes of the natives are principally located in the mountain ravines.

One day we lost ourselves in one of these extensive fields, and circled around, unable to find an exit except by making a straight road through the maize. This course would have risked arousing the anger of the natives, and I was anxious to avoid giving them offence. Unexpectedly we came upon an open space not larger than ten feet in diameter, and here a group of natives were busy cooking, squatting round the fire, with four or five native pots filled with food. Their surprise was so great that they fled like wild animals and we saw them no more. My carriers, always ready for a meal, stormed the pots eagerly, but to my surprise they drew back and looked mysteriously at each other. Being surprised to see the "boys" refuse food, I inquired what was the matter, and after some time learned that the pots contained human flesh.

This unexpected incident frightened my carriers. We were in the heart of cannibalism, which, although forbidden, is practised in secret. I at once gave orders to proceed in haste straight through the fields, ignoring the paths, to the slopes of the mountains,

where I could overlook the district and feel more safe. The experience was distinctly gruesome, and I was keen to quit such a district. After some days, when my horror had subsided somewhat, I had long talks with some of my "boys" regarding cannibalism, and I gathered that those who eat human flesh belong to a distinct sect. My informants added that those who once eat human flesh, especially white flesh, prefer it ever after to any other meat, and I did not find this statement encouraging. But my fears were soon forgotten among the interesting country which I now entered.

A picturesque valley led up to the summits of the plateau. The only habitations were a few isolated huts at the entrance to the valley. Both sides were steep and towered precipitously from our path, widening and narrowing alternately as we ascended rapidly to an altitude of 5000 feet. In this gorge a new danger helped to banish the fears of entering a cannibal menu. The way led beneath one of these steep precipices, and we heard ever and anon the bark of baboons echoing from the craggy heights. Presently a hail of stones fell around us and large boulders rolled past us at great speed. The whole caravan had to rush for safety to an opposite bank, from which we could plainly see a large troop of baboons busily collecting stones on the edge of the precipice to hurl at us. I fired several shots among

them and they disappeared. We passed on without further interruption.

After the fatiguing march over the stony and rocky ground a steep climb brought us to the plateau, and at about 6000 feet on the Kahandwe stream we pitched the tent and took our well-earned rest. It was very cold and I was glad to use my overcoat.

On the following morning at sunrise we started to cross the plateau, and were told by natives in the valley that it was a very long day's march to the western slopes, from which I proposed to descend to the Niembe Valley, where there were many villages to provide food for our party.

The summit of Mount Mugila was dissimilar in its natural features from the mountain-tops we had already crossed. The plateau was undulating, but sometimes for miles it was quite flat, and covered with tufts of very short grass and flowers, between which the barren ground was sandy and pebbly. In other places rocky knolls and hillocks cropped out, marked promiscuously by large grey boulders veined with white quartz. The rivers which flow through the flat plain to the east and west descend abruptly and thread their uneven way through innumerable clefts and gorges, flowing on the one side to the Tanganyika and on the other side to the Lualaba River. On the plateau, which is entirely bare of tree vegetation, these streams cut

deeply into the rocky surface, their rapid descent increasing their power to gouge their beds ever lower and lower. These spruits give no indication of their presence until one is right on their brink.

After marching twenty-five miles with a cold east wind blowing from the rear we entered a deep wooded ravine, emerging from which we overlooked the sheer drop of the Mugila Mountains. In an almost straight line due north rolling forest stretched over the valley as far as we could see. We had already accomplished a hard day's march, but we had much still to do. Down a steep descent under the deep shadow of the trees, through thick fern undergrowth, we bent our weary steps in the hope that before nightfall we could reach the village near the foot. My carriers were as tired and hungry as I was, after a long march which seemed never ending as the darkness grew deeper.

At last we reached a clearing that indicated human labour and the proximity of the village. Crossing a bubbling stream, called by the natives Mafia, we welcomed the outlines of the huts a short distance ahead in the gathering darkness.

We soon reached the kraal and lost no time in making camp. It was late, and I noticed the difference in the natives only when the bargaining for food commenced. They were friendly, but different in disposition from those hitherto met. But we were

tired and hungry, and I had no inclination for haggling that evening. Next morning, which was clear and sunny, the chief and all his inquisitive subjects swarmed around me. I was able to see that the character of the natives was changed as much as the character of the country. Their demeanour showed much independence, and I saw that I must be cautious in dealing with them. These were the Balubas. Their method of greeting each other and also strangers was extraordinary, evidently a strong national or tribal custom unmodified by European influence. On meeting, two natives kneel on one knee. Each takes a handful of earth from the ground and strews it crosswise over the breast and arms.

Judging from appearances, the natives were all controlled by their chief. He was, however, only a minor chief in an outlying kraal. He and his people were anxious I should go direct to the head village, and accompanied me in great numbers through the forest to the big sultan, about ten miles distant.

The news of my arrival had spread quickly, and along the entire route groups of curious natives of all ages and sizes and of both sexes shyly watched my caravan. As we passed, children ceased their play and fled, howling, out of our way, and even the dogs snarled suspiciously at the unusual stir.

Not far from our destination the Mafia spruit had

to be crossed. It was much deeper and wider at this part than at the point where we had already negotiated it. My cavalcade, with hundreds of attendant natives, descended and ascended the steep sandy banks and emerged on the central street of the head village, which was lined with huts on both sides, and thronged with the populace eager to see the white man. Passing through this jabbering, screeching, and laughing crowd, excitedly running to and fro, I reached the top of the street, and following a narrow fenced path, where a wooden image stood guard on one side, I reached a wide open space between three large, strongly built huts of quaint appearance. This was the abode of the great chief Kabeke, who was sultan over all the other chiefs I had met. This important personage did not come forth for some time, and the natives, when asked where their chief was, only answered, " He will come." After some waiting I became impatient and ordered my boys to form camp. He soon appeared and greeted me with dignity and independence. I lost no time in making friendly overtures and invited him to sit down at the entrance of my tent, when I told him that I wanted nothing from him but food and the assurance that I could travel unmolested through his territory. I felt rather uncomfortable, but I tried to appear unconcerned. Without waiting for any intimation of his intentions, I made him a present of a good blanket.

I asked him to order fowls and eggs to be brought, and he did so reluctantly. When the food arrived I paid him more liberally than usual with calico, and he became a little more amiable. I began to feel more at ease than I had done when I pitched the tent in his square. I stopped here two days in order to make friends with the chief before proceeding farther, and also to learn something regarding these interesting people and their customs.

I visited several large villages in the vicinity, and was astonished at their size and population.

For such short excursions I was accompanied by my three personal boys, who carried my usual equipment of guns, geological hammer, flower press, and insect-poisoning bottles, but I was followed by a large crowd of curious natives as well.

The villages usually consist of straight rows of huts, which are built in pairs back to back, and the two entrances of a pair of huts face different streets. If the village is large, four or five broad, regular, and well-kept roads run between the rows of huts. The centre of the road is usually planted with trees, and contains numerous kinds of images of various forms and sizes, erected in every village to the memory of the dead. I noticed at the entry to the village Kabeke a stem of a tree on which was set the figure of a human head. A hole had been cut in the skull and maize meal was placed in it. The belief is that the spirits

of the dead enter these figures and continue to take an interest in the affairs of the tribe. In another village was a large clay figure resembling a tortoise painted with black and white stripes. Mealie meal was placed on the head, and a grass roof made a shed or primitive temple for the sacred tortoise. Farther to the west I saw large clay balls painted with black and white spots, and pierced by two large antelope horns, over which was also a thatched roof. The larger and more conspicuous figures in all the villages are erected to the memory of the chiefs, and the more powerful they have been the greater is the figure of "Musimu," as the natives call these shrines. To the ordinary negro, a small round pot filled with maize meal and covered with a grass roof is the only memorial. In some villages shelves are constructed out of bamboo reeds, and on these shelves smaller images are erected.

The huts are neatly built of a coarse grass thatching, made to the form of a cone. The entrance is only a small round hole, just large enough for a man to creep through. The grass thatching comes well forward over the entrance, and is neatly cut and trimmed all round. Some of the more important natives plaster the entrance with clay, on which drawings are sometimes made. This is the height of their pictorial art. The interior of the huts is very clean and tidy. The fire in the centre is kept burn-

ing day and night. They sleep around it, and it is a common thing to see a native who has burns acquired by sleeping too near the fires. Several natives came to me for medicine for these burns.

These Balubas take great pride in their hair. They tend it carefully and spend much time in dressing it in many fantastic ways. The right and left sides of the head are entirely shaved, and on the top a band of woolly hair from the forehead to the nape of the neck is left. A fashion much in favour consists of rows of fine and small plaits on each side of a middle parting. Other Baluba Brummells have two large rows of tight woolly curls from the left temple to the right, divided by a parting in the middle and ending in six plaits on the crown of the head. These plaits are tied at the crown in two bunches. Yet other natives smear the whole head with clay.

The women generally wear their hair in three ridges on the top of the head to the neck, with a half-curled ridge at each ear.

In all the villages chickens and many dogs run about the streets, but there are no cattle. The cultivated lands are always a little distance from their huts, and the principal crops are arrowroot, sweet potatoes, and maize.

Before the few days of my stay in this neighbourhood had ended, the chief had become fairly friendly, and as news spreads quickly, I gained confidence that

I would be able to pass safely through the kraals of his many subordinate chiefs and of other powerful chiefs not subject to his sway.

My way led still to the west, farther into the territory of the Balubas and through forest country with thick and high grass. At an altitude of 3500 feet we marched for two days towards the village of Bele.

When we entered this kraal I at once sent my personal boys to ask the chief where I might pitch my tent. He soon came to me in person and led me to a nice open place near his own hut. His black followers swarmed round me, and reminded me of a disturbed ants' nest whose inhabitants rush out to ascertain the cause of the trouble. All looked wild and excited. Each carried an assegai of artistic design, and the whole company had an air of ferocity which, happily for me, was not carried into their conduct. They regarded everything about me with great astonishment. Thicker and thicker they thronged around me, and when the camp was finally arranged I entered my tent. The crowd at once barred the entrance completely, some lying down, others kneeling or standing, and others pushing to get a glimpse of my doings, while their noisy jabbering was almost deafening. When I began my toilet preparations and put the comb through my hair, which I had allowed to grow long for protection from the

THE BALUBA VILLAGE, KABEKE

INQUISITIVE BALUBAS BARRING MY TENT

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"From the front hill I witnessed the fight of the Baluba and Batumbwe cannibals, which took place in the valley behind it"

sun and insect stings, the interest increased and exclamations of wonder rose from the crowd. I could not leave my tent when I wished, as the crowd continued to throng about it, so I closed it and rested on my stretcher till the natives slowly disappeared and dispersed.

Leading into the square in which my tent and the sultan's hut stood was a large road, with many images down the centre and huts lining it in pairs, as already described.

On this road a great dance was performed on the evening of my arrival and was kept up nearly the whole night. It was accompanied by the beating of drums and the blowing of native wooden whistles. The noise was fearful and sleep impossible. In fact, it was necessary to keep watch, as the natives become dangerous when excited.

Their style of dancing is curious. First they form a circle, in the centre of which stand the drummers. Around these the dancers march in slow step, one behind the other. Others from time to time join, and when the circle becomes very large a single dancer springs into the middle and with weird, wild movements performs for a few moments, then returns to his place, when another jumps into the ring and tries to outdo the last in eccentric antics. The dance continues thus for hours. Fights often ensue through jealousy. The chief Bele was fairly friendly,

and food for myself and carriers was brought in willingly. Perhaps he had heard good accounts of us from the last chief.

These people seemed to be a superior race, dignified, proud, and holding firmly to their old traditions and customs. I remained among them in the Niembe Valley about three weeks, and my last camp was at their village of Banga. When there a native came to me for protection, pursued by a howling mob. It appeared that he was a victim of the horrible smelling-out practice. I took him under my protection, and the crowd, seeing him in the care of a white man, dispersed. They knew that the practice is forbidden and sternly repressed by the white officials. This native afterwards became a good servant.

For the burial of their dead, these people dig a deep shaft with a tunnel at the bottom, in which they place the body in a sitting posture with the face pointing to the east. The obsequies of any great chief still include the murder of many of his wives and slaves, whose dead bodies are thrown into the shaft. It is still believed that a big chief must always be accompanied, even on his last journey, by a train of followers.

From the time I entered the country of the Balubas at the foot of the Mugila Mountains, I had travelled 150 miles to this last village, at which point I made for the northern extremity of these mountains again,

in order to return to Lake Tanganyika. My object was to zigzag across these high lands as often as possible, in order that I might be acquainted with the healthier parts of Central Africa, which are of great importance for possible European settlement.

Leaving the village of Banga with the outlines of a range of mountains growing indistinct to the west, our direction led due east. When we got to the Niembe River, the summits of the great Mugila Mountains stood forth clear in impressive majesty. The river had no bridge to help our crossing, and the carriers had a hard task to support their loads over large granite boulders and through the swift current.

By crossing this river I left the territory of the interesting Balubas and ascended a spur of the Mugila Mountains, reaching a small plateau about 200 feet above the valley. Through scanty tree growth, over streams and swamps, we reached a long ridge, which we crossed, and then entered flat forest-land with glades and park-like patches of country. Hillocks rose in tiers up to the great Mugila Plateau, where mist-clouds were driving along the huge walls of the rugged uplands and a fine rain was beginning to fall. Through alternate rain and sunshine we topped the rugged crest of the first hill, commanding a fine view of the rolling plain below.

Here the carriers rested, as their habit was after

a stiff climb. Suddenly in low and excited tones they directed my attention to a large glade stretching far to the north-east, with thick and dark green bush in the background. The light rolling green brightened with gleams of sunshine was dark with black moving figures, and on closer observation I saw that a terrible fight was in progress. Yells of pain and of defiance could be heard, and I judged by the many figures in war-paint hurrying towards the thick mass that the fight was only beginning. Our position was dangerous, so I decided to move on quickly to the summits of the Mugila Mountains, which were still about ten miles distant, and we followed a winding track through the forest and swamps. Sometimes the path brought us nearer to the fighting area, where the wild screams and yells sounded in alarming proximity. Sometimes open spots afforded a clear view of the battle. Once a troop of Baluba warriors crossed our path unexpectedly, but in their mad haste to join the fray they failed to notice us under the cover of the thick bush. Only one man who sped to a hill in front saw us. He indicated that a larger body of warriors was approaching the spot where we stood. He pointed to his ears as a sign that if I listened I could hear the steady tramp of their feet and also their cries. He told me that the fight was between the Balubas and Batumbwes. Then he disappeared, and we hurried up the hill. Soon we heard the noise of the approaching

band, whose yells and excitement indicated that all their passions were aroused.

We gained the top of the hill and selected a good shelter. Then I had all the loads brought together to form a sort of barricade round us. We were out of the actual zone of danger, and I decided to stay and witness the engagement from my point of vantage.

From this rocky summit, rising almost sheer above the plain, I was able to see all the movements. The men were in full war costume, their dark forms adorned with leopard or monkey skins or painted with red earth. With towering head-dresses made from the dark red and blue feathers of the lauri bird, and brandishing their spears, whose points flashed in the sunlight, they advanced from each side in yelling hordes. In the centre of the scene only a confused mass of fierce warriors could be discerned, falling on each other with fury, and screaming defiance as they dashed and stabbed. For an hour this stabbing, mangling, and hacking with assegais and hatchets lasted, and then I could see a gradual change. The whole mass was moving slowly towards the north, which showed that one side was being driven back. The movement was continued and became more rapid. In quick successive charges the victors swept down on their enemy, trampling under foot the dead or dying, and following the remainder, as they finally broke and fled into the forest. All was over, and I could see that

the victors were the Balubas, who then assembled in the plain in excited groups, some forming circles and dancing in mad glee, while others fell exhausted under the shade of the trees.

After a while they gathered the dead in heaps, great fires were lighted, and I witnessed a horrible sight. The mangled bodies were cut into pieces by the victors, then roasted and eaten with astonishing rapidity and evident relish. My carriers naïvely remarked, "They only eat their enemies."

It was now about four o'clock in the afternoon and intensely hot. I should have liked to rest until it was a little cooler, but the sickening experience through which I had passed forced me to move on, and we did not stop until we had reached the top of the mountain. On the way up we passed several terror-stricken villages, where I learned that the cause of the fight was the stealing of the young women of the Balubas by the Batumbwes, who had also burned and plundered many of the kraals.

I formed the evening camp on the source of the Luvuley River, on the top of the western escarpment of the Mugila Mountain, about 5000 feet above sea-level.

I cannot pass on without saying something more about that eventful day, May 25th. In a sense I was privileged by being able to look on at a considerable battle, fought without any of the scientific appliances

with which civilised enemies engage. My sensations were mixed throughout the fight. I could not quit myself of the feeling that these were my fellows, that I was one of them. I seemed to be transported back ten thousand years, to the time when man had just merged from the Neolithic Age. Primitive passions were let loose and men sprang at each other's throats, the instinct to kill dominant over every other feeling, the effort to kill tensioning every muscle. I thought how civilisation had raised the human race since scenes like this were of common occurrence in Europe and in Britain. And then I thought—have we advanced? Is not every war, even if waged by the aid of Maxims and howitzers, Mausers and Lee-Enfields, as deadly in its purpose and its work? I had to confess to myself that this was a picture in miniature of a war such as would be waged if Celt and Teuton, Slav and Latin, let loose their engines of destruction against each other. Then I became ashamed for my kind, the heirs of all the ages, that we had advanced so little or not at all. Meantime while I speculated and philosophised men were disembowelling each other below me. I thanked God for civilisation as I saw the bloody ordeal. Whatever the white man may have done for the coloured races, this at least he has accomplished: scenes like that I now witnessed become impossible when white government has become established firmly among savage races, and this

carnage was perpetrated only because white government was still too weak to hold in check the social forces that appeal to arms instead of to law, where the arm of the law cannot reach. Then the carnage culminated in the cannibal feast, and my only impulse was to flee from the sight—not from fear of my personal safety, but to get away from the accursed thing. Horror overcame every other sentiment. The scenes of that day remain graven on my recollection as if burned in by acid.

The following morning it was cold and windy, and we started early in an easterly direction over this high, undulating plateau towards Lake Tanganyika. The western escarpment on which we were, forms the watershed of the rivers flowing to the Tanganyika, whereas farther south, where I had crossed the Mugila Range some weeks before, the streams extend about ten miles into the centre of the plateau. As in the other plateaux, there was an absence of native villages. Following the course of the Lubatju River through a shallow valley banked by swamps, grassy sweeps, and vast wooded slopes, our descent was very gradual. A long march of twenty-five miles brought us in the evening only 400 feet lower and still 4600 feet above sea-level. Progress then became slow. A series of mountain ridges, terraced down to the Tanganyika shores, and many rivers blocked with rocks and boulders, with swift currents and swollen

by rains, hindered our march considerably. Much time was lost in cutting down trees to make bridges. The soil was clayey and slippery, and the marches up and down the steep slopes were exceedingly arduous, so that we had to camp frequently without having accomplished any great distance in the zigzag marching. Several times we had glimpses of Tanganyika. As the Lubatju River, after cutting through the smaller ranges, took a course due north, it was several days before we reached it. I did not regret this, as we were now in very beautiful country, thickly peopled by the Batumbwe race. Numerous footpaths running in all directions showed that the land was everywhere well populated.

The carriers cannot keep together in such mountainous country, the stronger invariably pushing on in front, yet it is rare that one of them takes a wrong path.

They have a custom of breaking off tree branches or plucking a handful of grass, which they lay across any path which those behind must not take, and so all arrive without fail at the camp, if some may be a few hours late.

In this valley I met a large herd of elephants, about forty in number, coming down from a tributary of the Lubatju River. As we were some distance from them and the wind was blowing towards us they were not disturbed by our approach, and it was an interesting

sight to see those clumsy, ponderous animals, some with huge tusks and some smaller ones—playing and splashing in the water of the swamps, or pulling up reeds and bushes, devastating a large wooded patch.

Some of us drew slowly near under cover, but the animals became aware of our approach, and they all disappeared with astonishing rapidity into the forest, where the noise of cracking branches gradually grew fainter, until it ceased as they got beyond hearing.

We continued our way through open country, with stones and boulders lying in our track, through tall grass, growing breast high, and over an undulating reach, so as to rejoin the winding river. Presently an abrupt descent was made to its banks, and we moved along at the bottom of a deep cañon wooded with palms, pandanus, and dracænas. Now and again the gorge widens into circular, well-protected spaces thickly inhabited, and planted with bananas and other native produce. Plenty of good, wholesome food was obtainable.

Continually crossing and recrossing this winding river so as to pass the steep walls of cliff which overhang the water, sometimes over rocky islands in the river-bed, and through thick tangles of bamboo reeds and creepers, we came to the lowest mountain terrace overlooking the great Tanganyika Lake. We were leaving behind the healthy uplands west of Tanganyika, and looking back we could see a great dark chain of

bold crests, jutting crags, falling slopes seamed with ravines, or smooth and rounded summits covered with soft green foliage, rising mass behind mass right up to the plateau. We also left the Batumbwe race, and by the shore of the lake, with its wide sweeps of grassy plain reaching to the mountains, we came among the Warohororo people.

The Batumbwes do not differ much in their customs from the Balubas. They are, however, not so clean and industrious. Their villages are laid out in a similar fashion, but are less tidy, and the huts roughly built with the thatching untrimmed.

Images are seen everywhere in the villages, but they are generally smaller and less imposing than those of the Balubas, the only large one I saw being in the forest on a footpath far away from the kraals, with a wooden fence round it. It was a very good imitation of a leopard, made of clay and painted. The hair-dress of the Batumbwes is also different. They leave a bunch of hair on the crown, braided in numerous plaits, and they shave around it.

The greeting is also somewhat different. They do not kneel on meeting, but touch hands twice and bring the hand to the breast. Although they are lazy in their villages, they cultivate their lands extensively. Marching along the shores of the Tanganyika, we found the plain bounded on the left by three mountains, called by the natives Luhindu, Kjahee, and M'Sonka.

For six miles we journeyed along past small villages with great banana plantations and extensive fields of Kaffir corn, sweet potatoes, and arrowroot, through a great morass overgrown by bamboo reeds with rotten stumps protruding here and there, causing the carriers many difficulties. Along by the Kabinda River, which flows into Tanganyika, and over a stony and bouldered hillock, we at last reached Rutuku, the head village of the Warohororos.

The sultan, with a large number of followers, met me on the way and was very friendly and hospitable. The villages are different from those recently visited, the huts being arranged in circles around a central open space hedged with reeds. The native customs are similar, but there are no images. The shores and grassy plains are all of sandy soil and are very fertile. Large and small marshes extend up to the foot of the mountains, and it is plain that the waters of the lake formerly spread over this area. Natives working in the fields have dug up canoes, some specimens of which have also been excavated by missionaries at Palu when building on the slopes of the mountains near the shore. A bank of gravel and sand lies right on the water's edge, much higher than the inland sandy grass plains. The sand has been gradually washed up by the periodical storms of this great inland sea, and the water splashed over the banks has no outlet, and remains to form stagnant

swamps which are continually replenished by fresh storms.

This sandy bar formation occurs in almost every case where bays stretch into the mountains. The rivers flowing into the lake from the west turn suddenly in an almost northern direction behind the sandbars, flowing through the plains, where they widen into swamps, and eventually find their way through narrow channels into the lake.

We continued our journey northward. The way led along the sandy shore close to the water, and when the waves prevented our walking on the ever-shifting sand, an event which usually happened about eleven o'clock in the morning, we climbed on to the high sandy bar, and thus for several days we made headway. Villages were often passed in the plains or on jutting slopes of the mountains. Beside these villages small stretches of land are cultivated, but on account of the swamps much ground lies idle. From the mouth of the Luvuley River to the Lukuga River the mountains with faces of stratified limestone reach to within 100 feet of the edge of the lake and run parallel with the shore, with always the sandy bar and swamps intervening. The Lukuga is the only outflow of Tanganyika. At the outlet sand has been heaped up here in still greater deposits in a bay surrounded by steep and rocky cliffs. From the northern bank of this bay the

river follows the circling walls behind the sand-bank to where a narrow precipitous gorge breaks through the great western mountain chain. By this channel all the waters of Tanganyika flow into the Congo River.

The power of the waves at this outlet is somewhat greater than in the other parts. Back through cycles of ages, when the storms have been exceptionally furious this outlet has been blocked with the washed-up sand and opened again by the same agents, so that the waters of the lake, having no other outflow, have risen and covered all these grassy, sandy plains as far as the mountain. Evidences of this process can be observed in the marks on the worn walls of the cliffs.

At the time of my visit trees standing in the water indicate that the waters are again rising. All along the lake I noticed sandstone of quite recent sedimentation, which is formed only on the shores lying under these high sandy bars and in exposed places.

Up to the Lukuga River we saw no tsetse flies, and this was the only part I found free from them along the great lake. But from the Lukuga northwards they gradually make their appearance again, and all along the swamps mosquitoes were very plentiful. From the Lukuga a good day's march brought us to M'Toa. We laboured over the sandy shores past many villages, where the inhabitants were all friendly, through various swampy vleis with high grass, and then over a cross range running east and west and

THE STATION M'TOA OR ALBERTVILLE

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A SUMMER-HOUSE

Of one of the Belgian officials at M'Toa or Albertville

several rivulets between rolling grass sweeps, dotted with high trees of oil palms. We always had beautiful glimpses of the lake through the wooded sloping ravines and from the bare summits. Then we reached the top of this cross mountain chain, from where we could see M'Toa lying on a pointed hill in the distance. Below us was a smaller lake called Gongwe, surrounded by many swamps, and from its side a large wooded valley stretched to the west. This lake is close to Tanganyika and separated from it only by a rocky bank. Beyond the valley, planted with banana and arrowroot fields, rose the face of a great mountain range, with the wild and rugged peaks of Mesium, Kitoke, Kilukulungu outlined clear against the sky. Soon M'Toa was reached, and at the lonely station I was most hospitably received by the officials, who were extremely glad to see a white stranger among them.

Although this station is on a small kopje surrounded by swamps and the district is not very healthy, the tsetse fly was not in evidence. The situation of the place is one of the most picturesque on Tanganyika. To the west lies the lovely mountainous country I had just passed; to the east the hill on which the station is situated falls abruptly to the lake. Wooded islands with beautiful bays and white and bouldered shores lie lonely and peacefully on the great expanse of water which bounds the horizon.

Only on very clear days a blue line shows that land lies far down in the distance. I stayed at this post for some time and made numerous excursions in the neighbourhood, which is full of interest. In the small lake of Gongwe, sometimes called Motoba, many hippopotami live in undisturbed seclusion, and in crossing the lake and mounting the jutting head of Kilini, with its flat, rocky, quartzite crest, I could command a fine view to the south and recall the incidents of my journey through it.

In a canoe I visited the island of Kibitchi on Tanganyika. On the edge of the island granite boulders are piled up and splashed continuously by the waves for a height of about five feet, making vegetation impossible. The sun-dried surface of the rock is whitened by the lime deposited from the waters. The entire island forms a hillock of large and small boulders of granite, densely overgrown by bush beyond reach of the splashing water. Water-ducks sunning themselves on the rocks, and swarms of tsetse fly, which forced me to leave hastily, were the only living things. Thence I rowed northwards to the islands of Milimi and Bilia. On the summit of the latter island, also densely wooded, I found the remains of old huts, probably abandoned on account of sleeping-sickness, but there were no inhabitants. From this spot I obtained a magnificent view northwards over the country I was preparing to traverse.

Of the whole district it may be said that every prospect pleases. New beauties were disclosed almost at every step. The great highland chain, with its three rows of step walls, stretched as far as the eye could reach, and the dark green forest growths, even on the precipitous peaks, showed distinct change in the character of the country. Having visited several other islands of the same character, I returned to M'Toa after an interesting day, passing on the way many huge crocodiles swimming lazily and sunning themselves on top of the water. These creatures present a curious picture as they swim in the still water. Usually only the head and tail appear above the surface and make a trail, but at intervals the whole body emerges, and the sun reflecting on the ribbed backs gives a skeleton-like and peculiar sight. Crocodiles are usually very shy, and are seldom seen in close proximity in the water. They are dangerous only on the shores, where they sometimes attack natives bathing in the shallow water.

VII

GERMAN EAST AFRICA

AND A LION ADVENTURE

I WISHED to visit German East Africa, and I made preparations to cross Tanganyika in a native sailing-boat, which I hired from a sultan, as the chief of many minor chiefs is called. I selected good native rowers who were well acquainted with the dangerous winds and sudden storms of the lake. It is considered risky to cross in a small boat, and many accidents have occurred to natives while smuggling rubber and ivory to the other side.

In the afternoon the native sailors arrived, and advised me to sail to the island of Kapisi and spend the night there, so as to be ready to make a start the next morning as soon as the current was favourable. I agreed to do so. I found that I could rely on their experience of the lake, and we left the island at ten o'clock next morning, the current from the north being too strong to make the venture safe before that hour. The waters calmed suddenly and we quickly put off. My crew of ten boys rowed under the command of a superior, and they did

their work well in the intense heat, singing in time with each stroke. Cleverly taking advantage of every breeze by spreading sail, we advanced rapidly, and soon the mountains of the other side became clearer. Luck was with us, and about seven o'clock in the evening we neared the cliffs of the German shore. For another hour we hugged the shore so as to camp at the village of Mashua, which the natives knew. But as it grew dark and the wind was cold, while we were all very tired, we decided to turn into the big M'Sissi Bay, which we reached by eight o'clock.

A sandy shore with dense trees and tangles of creepers garlanding the border and forming dark arches over the portals of the forest reminded me of the picture of the Death Island. The stillness of the night hung over this weird scene, and the release of the oars in the boat made a hollow dismal sound as we landed.

The boys pitched the tent with difficulty on the sandy shore and had to fasten the ropes to the hanging creepers and tree-trunks. They next lighted the fire to prepare our hasty meal, and then I retired to my tent to rest, while the carriers lay round the fire.

Very soon, however, the stillness was broken by the distant roar of a lion. Again and again the thunderous voice pealed forth, and the red glow of the fire shone on the terrified faces of the natives as the horrid coughing roars approached. Presently

another hollow bark came from the direction of the jutting arm of the bay and echoed in deep and fearsome tongue over the dismal waters, and we realised that more lions than one were coming round us.

I had often heard the deep-mouthed roaring of the forest king before, but the desolate surroundings, the darkness and awesome stillness, helped to accentuate the feelings of uneasiness. In numbers these animals are courageous, where a single one may be a coward. Distinctly we heard the breaking of the branches and the barking noise of the animals, jealous which should first get its prey, as the formidable beasts crept steadily nearer under cover of the forest. Suddenly I heard a terrified scream from my carriers, who, taking the burning branches from the fire round which they had been huddled and throwing them at the beasts, rushed wildly to the boat, which they pushed off hurriedly from the shore, leaving me alone in the tent. My position was not an enviable one. My guns were of little use, because in the darkness I could take no aim ; and the natives in their retreat had spoiled the fire, and nothing was left with which I could make another except some dry grass in the frames of my tent.

The common belief that a lion will never enter a tent seemed justified in this case ; but to remain calmly still with only canvas walls between me and such formidable creatures was not to be expected,

ONE OF THE BELGIAN STEAMERS PLYING ON
LAKE TANGANYIKA

THE TANGANYIKA LAKE
Near M'Toa or Albertville

A ROCKY PART OF TANGANYIKA

Favoured by the tsetse fly

THE BOAT

In which I crossed Lake Tanganyika (40 miles)

especially as the boys continuously shouted that more were coming. So, firing repeatedly into the darkness and setting fire to the grass I had collected, I retreated backwards to the water, where I had to wade up to my arms to reach the frightened natives, who were too paralysed with fear to row nearer to me. We passed the remainder of the night in the boat, where swarms of mosquitoes brought new miseries.

The roaring of the lions, disappointed of a meal, continued till long past midnight, and at daybreak, after a poor rest, we landed again and inspected the deserted camp. We observed from the many footprints and the trampled branches that we had escaped the teeth of many ferocious beasts.

The tsetse fly, which is not troublesome at night, also molested us in the early hours, so, losing no time, we departed, without waiting to make a meal, to the village of Matupa, which it had been our original intention to reach the night before. Here we breakfasted, and pushed on northward along the lake to a head station, Ujiji, which we reached the next day about noon.

Several small bays were skirted with projecting rocky capes of flat layers of basalt, and topped with dried scraggy grass growth and dotted with mimosa trees. The low, rocky shores of the lake afford little variety of scenery. The bays continue generally

farther inland as valleys, with streams flowing to the lake, more or less forested and in some places cultivated by the natives. These are the more fertile parts of the coast.

The eastern side of Tanganyika differs much from that of the western or Congo side, and Nature has been less generous in her favours. The natives too are of a lower type and less interesting. Several tribes live near the lake, but a great portion have emigrated to the Congo. They have deserted their land either on account of friction with the authorities or through inducements. It is comprehensible that on account of the illegal trading on the lake, trouble with the authorities causes the wandering native to make or adopt many devices to evade the law, and the race is thereby becoming debased.

Near the lake the land is undulating and low-lying, but at some distance in the background rise irregular mountains, single hills and ranges, covered with grass but little tree vegetation, very different from the uplands prominently and regularly bordering the lake on the Congo side. The water's edge is marked by masses of piled-up boulders washed continually by the waves, and in places shaded by mimosa and other trees. These are the favourite haunts of the tsetse fly, which abound in great numbers, never flying farther into the lake than about fifteen feet from the shore, so that it is always possible

to steer the boat clear of them. As the tsetse flies are thick along the entire shore from south to north, sleeping-sickness has committed terrible ravages, and through the trade in salt, rubber, and ivory between the Congo and German East Africa, it has rapidly spread through the agency of flies carrying infection from sick natives. Some of the stations have had to be abandoned.

In the infected areas there are several camps erected by the authorities to treat the patients after the method of Dr. Koch; but as far as one can see, the cure is only temporary, as it has repeatedly happened that patients discharged as cured have returned to the hospital about six months afterwards to succumb to the disease sooner or later. How long the treatment must be maintained in order to make a permanent cure has not yet been definitely ascertained.

As far as is possible the strictest control is exercised, but owing to the multitude of negroes and the great extent of the areas concerned, it is and will remain difficult to stamp out the dreadful disease, especially as the natives hide or run away to escape being brought to a camp, which they look upon as imprisonment. In the second stage of the malady the patient develops madness, and the confinement in camps is necessary. In Ujiji an unfortunate victim of this disease ran through the streets armed

with an assegai stabbing everything he came across, and finally he had to be shot.

No words can picture the awful desolation that has come to certain parts of Africa through the ravages of sleeping-sickness, and no man who has not been an eye-witness of the scenes and sufferings can appreciate the continual horror that haunts the community where the fell disease stalks. It throws a blight over the land, and the spirits of the onlooker are burdened by a heavy nightmare that weighs him down by its oppressive and progressive malignity. Man stands powerless to avert the doom that he sees creeping over his unfortunate fellows—almost powerless to afford any mitigation of the awful sufferings. Dante conceived nothing worse in his most lurid flights of fancy into the vaults of eternal punishment. Something of the same soul-sickening is experienced during a perusal of Defoe's *Journal of the Plague Year*, but the reality of the thing at one's elbow is ten times more horrible than the printed record of a past century. The effect is heightened by contrast with the fairness of the land, the beauty of earth and sky, the profusion of Nature's bounteousness in the regions where the dire doom lurks in every bush, and wipes out the population as a wet sponge obliterates the words and figures from a schoolboy's slate. The disease has exacted its greatest tribute of human life on the shores of Lake Victoria

SLEEPING-SICKNESS CAMP AT USUMBURU IN GERMAN EAST AFRICA

A VICTIM IN THE LAST STAGE OF SLEEPING SICKNESS

The figure on the right is one of the native guards

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Nyanza. The male negroes are more exposed to infection than the females, and the proportion of deaths is seven males to one female. Since the year 1901 the devastation has been appalling, and in many districts the population has been exterminated, and in others the inhabitants have been reduced to one-tenth of their former number.

Sleeping-sickness belongs to the meningitis group of diseases, and is a type of chronic inflammation of the brain. Infection is conveyed by a kind of tsetse fly (*Glossina palparis*). It has yet to be discovered where the fly received the germ. Not every fly is infected. The germ is called the Trypanosoma. It is found in the cerebro-spinal fluid and in the blood of the victims. From the time of infection the disease takes from one to seven years to develop, and an individual who has been in the fly area lives in uncertainty whether he has contracted the disease or not. It may break out in active symptoms when he is in a different part of the world. It develops in three different stages. The behaviour of its victim is as follows: During the first period the patient is apparently healthy, but his energy and desire to work gradually decrease. His eyes are drowsy and the glands of the neck swollen. He shows little evidence of illness so long as he does not strain himself with work. He is useless as a carrier. In the second stage his appetite becomes less. He is disturbed

mentally and his behaviour is strange. In many cases raving madness develops, when the sufferer acts according to his temperament. Some victims talk strangely, others commit murder, and many set fire to their huts, this last being the most common manifestation of the madness. The limbs become weak, and there is itching of the body, with a feeling of coldness, yawning, and pains in the chest. The third stage is the period of exhaustion. The sufferer sleeps more and more. If awakened he falls to sleep again at once. He takes food when it is offered, but does not ask for it. He may fall asleep while talking or eating. The eyelids droop unconsciously and the face is expressionless.

In West Africa the disease has been raging for more than a century, and the germs are supposed to have been carried to Lakes Tanganyika and Victoria Nyanza. Special Commissions have been sent out to investigate the sickness and to alleviate the sufferings. The best scientific effort has failed in success. In no instance is recovery known. The sufferings may be relieved and the patient's life prolonged by an injection of otoxyl (Dr. Koch's method). The use of otoxyl is dangerous, as if wrongly used the patient becomes blind. Its injection is painful, and for this reason the negroes run to escape treatment. It is, so far as we know, impossible to stamp out the disease. Wherever it takes hold it exterminates rapidly all in-

habitants. Whether the few that have been spared may be considered immune is not known with certainty.

Ujiji or Kawela, famous as the meeting-place of Stanley and Livingstone in 1871, is the head-quarters of the German territory on Lake Tanganyika, and lies on a hill with a fairly healthy climate. Many Indian traders and one European trading company are active here. There is a great trade in salt, which is obtained from a salt-pan four days' distance from the station, but the main commerce seemed to be in rubber and ivory, which is brought chiefly from the Congo. Natives are employed, and are entrusted with much bartering material to go to the Congo and smuggle the rubber and ivory over the border. Many of them arrive with large quantities, as I have myself seen, and others again make profit out of deceit, and either never return, or come back with the tale that they have been caught by the authorities, who have confiscated the bartering goods entrusted to them. Through this illegal trading lawsuits are constantly being prosecuted. There are several localities in German East Africa where rubber trees were plentiful, but through the wholesale destruction of the trees this natural wealth has been destroyed, and, if the authorities in the Congo do not take precautions, their rubber resources, which are enormous, will also diminish in value.

Newly planted rubber trees take many years before the gum can be extracted, and then it depends on the nature of the plant whether it will supply the quantity which a native rubber tree forty or fifty years old can yield.

The policy that destroys valuable rubber trees for the sake of a slightly larger immediate return is wanton folly. Many traders and business people have been guilty of such folly, and have destroyed much natural wealth which care would have kept perennial. They have no interest in the country except as a means to get rich quickly, and leave with well-lined pockets —never to return—when the destruction is completed.

All the natives here who still wear their native dress are called Schanzis. The north of Tanganyika is inhabited by the Wahas tribe, who cultivate wild palms, from the fruit of which a fine oil is obtained, which they use for cooking and eating and which has a great market among the natives far and near. They drape themselves around the loins with a kind of cloth made of the bark of a tree called melumba. They do not smoke their tobacco, but take the dried leaves, soak them in water, and draw the juice up the nose. To hold it there, they fasten on the nostrils springy pincers made out of wood or bamboo. This performance is by no means attractive. To the south of Ujiji is the Wawenda race of natives; to the

south-east, the Wafinsas; to the east, the Wakarangas; and to the north, the Wahonis. All these tribes were originally natives of the Congo. They cultivate maize, sweet potatoes, matama, and bananas, and in some parts many cattle and goats are kept. Along the coast of Tanganyika the natives spend much of their time in fishing, venturing far into the lake. They have a curious custom of making a flaring fire of dried wood in a vessel at the stern of their boats, and this they say attracts the fish. Standing on the shore in the evening when many fishing-boats are out, one is rewarded by an entrancing and unique sight. The fish caught are of excellent flavour and make appetising dishes.

There is post and telegraph connection under good management at Ujiji. Communications are more regular than in the Congo territory and correspondence comes more quickly from Europe, this being possible by reason of the through regular connection with the coast. In this neighbourhood are about 20,000 natives, of which 5000 live on the station. The many luscious fruits grown here by European traders include custard apple, pau-pau, banana, mangoes, pineapples, Cape gooseberries, mulberries, citron, mandarin oranges, date palms, and cocoanuts.

After despatching my cases of collections from here and obtaining fresh supplies for the continuing of my

journey, I crossed the lake again safely to the Congo side.

Lake Tanganyika has been sounded to a depth of from 300 to 3500 feet, and in the summer or rainy season great and wild storms rage on its waters.

NATIVES OF THE WAHA TRIBE

The nose pincers are used to retain tobacco juice in the nostrils

THE SHORE OF KATENJA BAY

The wooded cliffs were too dense to climb

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VIII

THROUGH KATANGA AGAIN

I WAS back at M'Toa, and after a brief stay I prepared to set out again for the north. But I found that I was still without a portion of my luggage, which I had left in charge of the official at Pweto under the promise that it would be forwarded to me at M'Toa. It contained some necessary articles without which I could not proceed far. So I sent back some carriers, requesting in a letter that my goods should be entrusted to them. I received my package in due course at Uvira.

On the 26th of June at eight o'clock in the morning I resumed my journey from M'Toa and proceeded a short distance northwards by boat to Kabanda, from which point I wished to mount the higher plateaux again.

Passing the three small islands of Kalimba, Maongai, and Maleka, I soon left the pretty bay and got beyond sight of M'Toa.

A propitious breeze from the south helped us along the coast. At midday we reached the Katenja Bay, which shelves far into the mainland, and a halt was

made. The attractive beauty of the steep and wooded cliffs and the majestic and towering mountains around tempted me to make a halt here. The tsetse flies met us on the shore, and sleeping-sickness was rife among the natives in this isolated creek.

The three terrace-like slopes to the plateau were well defined, and we climbed over large granite and diorite boulders with tilted mica schists on the sides of the precipices. Under the shade of the trees I made a way up until I was faced with an impenetrable barrier of dense tangle. No natives live in these higher healthy parts, the population seeking the shore, where fishing can be followed.

Bright-winged birds and butterflies flashed from tree to tree in the sunlight, wild pigeons cooed their love-songs, and only the sweet harmonies of nature fell around like a mantle of peace.

After a few hours' ramble we started again, and when we reached the boat the tsetse fly stung us back from the realm of poetic sentiment into that of irritation and discomfort. We skirted precipitous cliffs overhanging the shore and casting deep, cool shadows on the water. Black-winged water-ducks sat and flapped their wings on boulders that broke the surface, and kingfishers flitted over the water. We skimmed along in front of a favourable breeze, the stillness broken only by the splashing of the oars.

Soon the island of Kasinga came into sight ahead,

and as we neared it, through a ravine breaking the steep and high walls bordering the lake lay a beautiful vista backed by the mighty Mount Lubandosi. No human life exists either on this island or in the creeks on the mainland near. Boulders are piled around the edge of the island, and the high rocky centre is thickly wooded.

Good progress was made. The steep and rugged cliffs, broken frequently by gorges, whence issue streams which descend in waterfalls and rapids, with the great mountain chain in the high background, composed many pictures as fine as ever inspired a painter's brush. Late in the evening the sandy shore of Mukisalela Bay was sighted, and, making direct for it, I decided to camp. No sound of human voice was heard, and in deep stillness we passed a peaceful night between the steep overhanging walls of the bay.

I decided next morning to change my manner of travelling. The incessant irritation caused by the hateful tsetse fly was a great physical discomfort, and the desolation caused by the sleeping-sickness oppressed my spirits. I kept only a few of my necessary goods and the rest I sent on ahead in the boat to Kabanda. Then with two personal boys I ascended through a gorge to the first terrace of the mountain chain. From here, over ranges, precipices, and ravines, we gradually rose to the upland plateau.

Here I breathed freely again in the cool breeze blowing from the lake and whistling through the long, wavy grass, a refreshing contrast from the stifling hot air below. The steep descent to the shore simplified the study of this mountain belt bordering the lake. To the west the plateau is undulating and of very gradual descent. Some distance west of this lofty plateau a dark belt of forest-land stretches to the north. This is the beginning of the bamboo forest, which becomes thicker and thicker northwards.

Although the way was rough and rocky, I mounted the Kisamba, Kale, and Kilunvulungu summits, which are almost bare of tree vegetation, except on the rugged, abrupt slopes facing Tanganyika, where palms of various kinds could be seen.

It was a long and tiring march along this uninhabited mountain range, but just before sundown we came upon a network of footpaths across the plateau and leading to native villages. From here I could see many kraals. We followed one of these paths, and it was quite dark when we entered the village to which it led. My carriers who had gone with the boat had already arrived and formed camp, but the chief seemed undecided in his attitude towards me.

I remained here several days and sent back my hired boat to M'Toa. After several excursions around, I found that the village was one of the busiest gateways

of trade between German East Africa and the Eastern Congo. The chief, who looked more prosperous than any I had yet met, had great stores of rubber, which had been collected by his people on the western slopes of the plateau and exchanged for other goods. When he saw that I was no official he became more communicative. He told me that he sends very little rubber to the government station—only the quantity that he is told to bring—the greater bulk going to the traders. I judged the quality of the rubber to be very good, and very large quantities reach the outer world through this collecting centre.

I made several excursions in the neighbourhood, and found that this was the first district where natives made their homes and cultivated their lands in the higher altitudes—one of the effects of the rubber trade.

Extensive lands are cultivated in the valley of the River Mulungu, which flows down from the high mountain of Monegelli. Green patches and huts are seen all over the slopes of the mountain, and the natives are healthy. It is quite otherwise on the shore of Tanganyika, where, strange to say, the sultan lives, and where much sleeping-sickness prevails. Several of his wives were affected, but he kept the fact secret, as most of the natives do if possible.

One day in descending from the mountains I had been examining in the country north-west of the

village, it was necessary to follow the strand for several miles to reach my camp. Finding a passage over the masses of boulders, under shady trees, tangled creepers, and overhanging cliffs, haunted by tsetse flies, I came to a rounded bay on the wide sandy shore, with high banks and a grass plain beyond. The hot rays of the sun beat upon the white sand in blinding glare, and turning a bend, I came upon a heap of human skeletons piled in a corner. Some were well preserved and others broken by the waves, and looking farther around I saw skulls and bones protruding everywhere from the sand. A feeling of horror overpowered me. How these dead came there I found out later by inquiring at the camp. It appeared that they were all victims of the sleeping-sickness. The sultan told me that those who die of this disease are thrown into the lake, and the storms wash some of them back to the shore, where many become buried in the sand. Making further inquiries at the kraal, the sultan confessed that numbers were sick and many dead. When I had occasion to open my medicine-chest he brought his afflicted wives for help, and before very long others came also, some in the last sleeping and skeleton stage, others in the second and mad stage. They were a more piteous sight than the dried bones on the shore. To get rid of these poor creatures, and because I had no medicine for sleeping-

sickness in my case, I distributed harmless purgatives.

For several days I explored the shores to the north and south in native boats, passing alternately deep, shelving bays and jutting, rugged capes, thickly wooded on the slopes and grass-grown on the summits, with the tsetse fly everywhere, making it almost impossible to enjoy the beauties of nature. Evidence of the desolation caused by sleeping-sickness accumulated—abandoned villages with signs of recent cultivation but without a living inhabitant.

According to the sultan, many thousands had succumbed in a few short months. These revelations caused me to shorten my stay, and packing up, I made ready for departure to the mountain again.

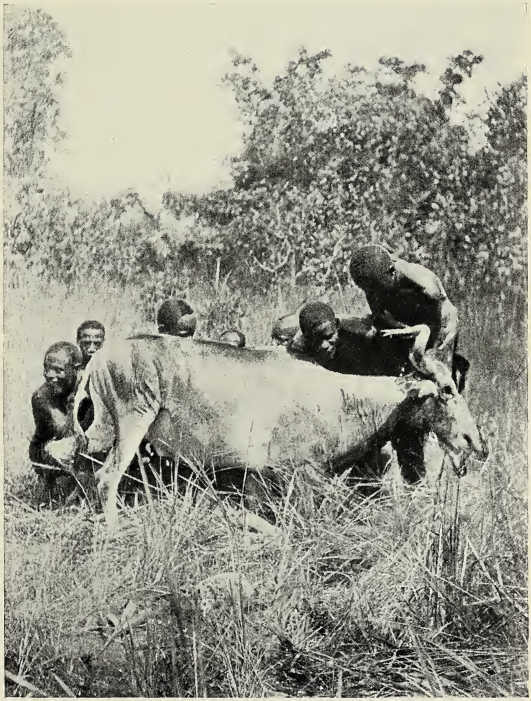
IX

THE TANGANYIKA LAKE AND ITS WEST COAST

AND AN ADVENTURE WITH A HIPPOPOTAMUS

AFTER gaining the plateau I directed my way to the bamboo forest, which was in sight. The country traversed was undulating. Bushy trees broke the rolling plain of waving grass, with occasional small stony rises where white quartz veins glistened from the distance. The bamboo reeds grow in groups on mounds which form a belt about a mile wide. A network of rivulets—some large, some small—descend to the west and gradually seek their way through deep ravines to the Lualaba River. These gorges are thickly wooded, and continue to be so until they meet the great forest of the Congo basin, the forest which yields its rich annual harvest of rubber.

My object was to push northwards as quickly as possible, and I returned to the plateau overlooking the lake. The country grew wilder and more rugged, until eventually I was fronted by the great Mosassi Mountain with its frowning summit, about 7000 feet



HARTEBEEST SHOT ON THE MOUNTAIN PLATEAU

SALT CARRIERS

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above sea-level. The peaks can be seen from a great distance all round.

Antelopes of different species abounded on the slopes and in the hollows, and looked up with startled eyes as we approached, fleeing at once to cover. Buffaloes and zebras were also seen, and near the great mountain lions crossed our path. As we walked along, unsuspicious of danger, an enormous lion sprang growling out of the high grass near our path. He had probably been disturbed in his midday rest by our approach. We were all taken by surprise and stood perfectly still. The great beast retreated gradually, suspiciously looking round as he went. When I thought the position a little safer I fired, and with a fearful roar he jumped into the air and turned fiercely towards us again. He was already lamed, so he could only come at us slowly. With a second shot I succeeded in killing him.

Below the Mosassi Mountain near the Tanganyika shore, on a little hill with enormous granite boulders outcropping, the only native village in a wide district was situated. The country became very rough, so we were forced to descend to the shore again. In doing so we had to round the summit of Mount Mosassi, and in a path through a cleft I found some bones of elephants. On the following day I returned to the spot to make excavations, which I was able to do only superficially. I succeeded in unearthing a

petrified elephant tusk, weighing about 27 lbs. Satisfied with my find, I descended to the village Simba.

During the preceding night some lions had invaded this village, entered the huts while the inmates slept, and carried off five of them. The sleeping-sickness had reduced the inhabitants to ten, and now, after the raid of the lions, only five were left to mourn.

All around, the vicinity is exceptionally beautiful, and not far from the village are the fine M'Kunkwe Falls. A magnificent view of them is obtained from the lake. At close quarters it is seen that they are a series of steep rapids, which appear from the distance as one cataract.

From here northwards the Warohororo negroes are left behind, and we come among the Bakoma race, which, however, is almost extinct. Everywhere abandoned and depopulated villages testify to the fearful havoc wrought by the dreadful scourge. Again I had recourse to a native boat to take me ahead, and, from the few isolated inhabited villages which we passed, I could see that the inhabitants had lost all hope and had allowed their lands to grow wild. They spent the whole day lying lazily by the water catching fish, upon which they subsist entirely. The villages of Kassongo, Simba, Musama, and Bon were the only ones with any inhabitants left, and in these only few inhabitants remained where formerly there were multitudes.

THE VILLAGE SIMBA

Where sleeping-sickness and lions reduced the inhabitants to five only

SCENERY OF MOUNT KARAMBA

HIPPOPOTAMUS SHOT AT BARAKA

On the rocky shores under the shade of trees ever and anon the loud bark of a baboon would resound, and files of these animals would walk in solemn procession, or jump over rocks and clamber through trees, with their little ones on their backs—a quaint touch of almost human life where humanity is under the blight of slow death.

All the natives practise tattooing, and different tribes have distinctive designs. The Warohororos, Balubas, and Batumbwes are tattooed with cross lines on the right and left sides of the stomach when they are children. As they grow up these lines are continued upwards to the breast. The Bakomas and Babwares tattoo their bodies differently. They prick a number of stars on both sides of the stomach. The Babasi and Babokwa, the races of the west, decorate the stomach, breast, and face with spiral-like figures.

Two days on the water brought me to Kibanga, formerly a mission station, but now abandoned. It lies in a swampy bay at the level of the lake, and is overgrown with masses of reeds. To the east a promontory of the southern mountain slopes of the Karamba or Bubwari peninsula shelters the bay, and to the west the rugged mountain chain which we had followed continues straight to the north, so that a broad, low valley is formed between these two mountain chains.

When the lake was higher the water flowed over

this valley, making Bubwari an island, which old negroes remember. It is perhaps the most deadly spot on the whole lake, and is infested with the thickest swarms of tsetse fly. Many missionaries as well as natives have found their death here, before sleeping-sickness commanded the attention now given to it. This dismal place was alive with crocodiles, and hippopotami, which were more numerous than anywhere else in my travels, barred the way as we proceeded on the water. From the distance we could see the great heads protruding from the water, grouping to watch our approach.

Some disappeared beneath the surface, others appeared, some turned somersaults, and all snorted and spurted water from their nostrils, making a lively scene on the smooth surface of the lake. The excitement was high, and I steered carefully along the reeds to pass these animals cautiously; but the tsetse fly prevented enjoyment of such a unique scene and forced me to move ahead more rapidly than I would have done. Much care had to be exercised to protect ourselves from the stings of these insects, which lighted upon us till they covered our persons.

Unexpectedly a great bull hippo swam under the water and charged the boat with such force from below that the whole contents, including the boys and myself, were thrown several feet into the air, scattered in all directions, and cast upon the reeds

with the sharp points sticking into our flesh. Luckily the water was not very deep. Collecting our senses and our goods, we got safely to dry land, but lost the boat, which had not been strong, and was shattered to pieces. The great monster returned to deep water satisfied with his joke, and the sporting still continued.

Fortunately about two miles off there was a village. The loads were carried there, and I obtained another boat to continue the journey. The chief of the village, by name Pori, was very obliging. He had seen our accident and was ready to assist us. His people had suffered terribly from the sleeping-sickness. Only ten inhabitants were left, and these were preparing to leave the place for German East Africa.

Standing conspicuously out from the high grass an enormous tree afforded the only shade. The natives jealously and superstitiously guarded this tree, even objecting to my pitching the tent under it, and not allowing my carriers to tread the ground near it. They believed it to contain the spirit of their old powerful sultan Karamba, and thought that anyone approaching it would be struck dead. The great number of deaths among them had increased this superstitious fear.

My stay here was short, and I moved on along the lake to Mount Karamba, where we rounded the northern cape in two days, meeting no inhabitants,

but seeing many large eagles flying about the cliffs. We entered the Burton Gulf, which lies in a straight line with Kibanga Bay, parted by the low, marshy valley already described. I camped at the village of Kasala, and to avoid circling the whole bay, which would have taken several days, we crossed directly to the military station of Baraka, which was opposite. This was not without danger, as the lake is very rough at times, and in a small boat the risk is great. The crossing is supposed to take about four hours. The weather being promising, we set off at seven o'clock in the morning. After we had been about half an hour on the water a strong south wind suddenly arose and lashed the waters. The waves got higher as we proceeded to the centre, the white foam scudding faster and faster towards us, tossing the little boat mercilessly. As the waves dashed on the broadside of the boat once or twice we nearly capsized, and steering against the waves was the only way to save ourselves. We attempted to turn back once or twice, but found it impossible, and although the natives rowed with all their strength, we were driven gradually farther into the lake. The heavy waves washed incessantly into our boat, and it was a hard task to keep the water low by baling it out.

The singing of the boys while rowing had long ceased, and their courage began to fail. For six hours we battled with the storm, and then about

two o'clock in the afternoon the wind subsided, and the danger was over. We had still three hours of hard rowing, which brought us to Baraka, where we landed absolutely worn out. I was hospitably received, and after resting for one day, proceeded to the head-quarters of Uvira.

The station Baraka is nicely laid out on a sandy grass plain at the level of the lake, surrounded by high and sloping hills, belonging to the same chain which we had followed all along Tanganyika. Here again it is clearly evident that the shore has been formerly under the lake.

Proceeding along the lake, we reached Uvira after three days. The mountains retreat farther inland from the Burton Gulf, and a great wooded plain stretches from their base to the inland sea. The shores are all sandy and in places covered with many reeds. The tsetse fly is not so prevalent. At Uvira, however, the rugged hills advance to the shore again, and the station is well situated and regularly built in a circular space at their foot. The streets are planted with young trees, and the whole place looks new. It is intensely hot, and little shade is to be got. The commandant of this post received me courteously, but showed some suspicion regarding the object of my journey.

From here I crossed Tanganyika, and paid a short visit to Usumbura, also investigating the northern

shores of the lake, which are sandy with patches of reeds. Few tsetse fly were noticed. The black inhabitants are very numerous, and live by fishing and by keeping many cattle, goats, and sheep. Usumbura is laid out regularly on a hill between two main streets lined with trees, and surrounded by many squares of cultivated lands and patches of trees, among which the European dwellings are scattered. The post office, court-house, and the official offices are in one well-built stone building painted white and thatched with grass. A mess-room and the living-quarters of the officials adjoin. Close by is a clean and well-kept hospital, and a large avenue of oil palms forms a fine promenade near these buildings.

Two broad roads lead through large banana plantations and the native quarters down the slopes to the landing-place. Some distance from this station there is a large hospital camp for sleeping-sickness. There are huts and shelters for the patients in the different stages of the malady, and all care and attention is bestowed upon the unhappy sufferers. According to the plans of the resident doctor, accommodation for 2000 sick persons is to be made.

Usumbura has a large market-place, to which natives come from far and wide to buy palm oil, for which the place is noted. At the back of the town lies a range of mountains, and altogether the station has a very picturesque situation.

The welcome which was extended to me by all the officials will remain a pleasant remembrance.

The northern shore of the lake is well cultivated by a numerous native population. Among the reeds on the dry, sandy banks an endless variety of birds nest. Black and purple water-hens run up and down the shores, egrets perch lazily on knots of reeds and dip their bills under water in search of food, long-legged storks stand in the water asleep on one leg, and wild geese and ducks swim to and fro and rise in flocks upon human approach, only to return at once to pursue their disturbed occupations.

X

THROUGH THE RUSISI VALLEY

ON July 25th I proposed to leave Uvira for the Rusisi Valley. The usual work of procuring new carriers was completed by the kind and valuable help of Lieutenant de Corte, and I marched over small rocky eminences and swift-flowing rivers with pebbled and bouldered banks, till I reached the Kivivira River, which flows in a half-circle into Tanganyika at its extreme north-west corner.

The natives here belong to the Wavira race, who live on the mountain slopes. They are of muscular physique, and I found them good carriers. They are skilful potters, making vessels of varied and ornamental shapes. They also extract iron ore from the higher ranges, and make spears, knives, and other implements of peace and war.

Entering a wide, grassy plain, dotted with thorn bushes, we left Tanganyika with its memories so blended of pleasure and sadness.

The great mountain chain which looks solemnly down upon so many varied scenes kept faithful guard on our left through the Rusisi Valley. This

OIL-PALM AVENUE AT USUMBURA

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THE RUSISI RIVER

valley continues the width of Tanganyika due north from the great lake. It is bounded on one side by the mountain chain referred to and on its eastern side by elevated peaks, the two ranges meeting in the neighbourhood of Lake Kivu, about 170 miles south of the Equator.

In the centre of this valley the rapid current of the great Rusisi River flows from Lake Kivu in short curves through steep furrowed cliffs to the open flat valley, and then winds farther in sweeping curves to Tanganyika, which it enters as a swampy delta. Tributaries from the two mountain chains descend to the valley and swell the waters that feed the great lake. Thus the Rusisi River leads from Lake Kivu to Tanganyika.

A few miles north we passed a hot spring, where the water was bubbling up from under a rocky crust of stones, and next day we saw another at the Lurunga River.

The undulating grass-land with scraggy thorn bushes gave the country a monotonous aspect, and only the groups of large euphorbia trees stood out dark green in contrast to the dried and barren veldt. Deep and dry "dongas" showed where torrents have worn furrows in the slopes, and the banks of the rivers where overhanging the water were sometimes fifteen feet high.

At the River Sanghe a change in the formation

is apparent. The two front terrace-like ranges accompanying the great chain depart from the straight line and swing round across the valley to the River Rusisi. Thus these two low ranges had to be crossed on our march north.

Near the River Rusisi herds of elephants and other animals are numerous. The disturbed rocks tell a tale of great eruptions in the dim past, and the indications are more obvious as we proceed. Small hillocks protrude, and the country becomes more rugged and broken. It was plain that the two lower ranges had left the line of the great mountain chain and been scattered about the valley in some great terrestrial upheaval.

After five days we crossed the River Lurunga at the point where the military station of the same name is situated. About 500 native soldiers were stationed here—not too large a garrison for such an isolated post. The station is encircled by a low ridge of volcanic rocks, and the River Rusisi bends sharply round to the west between pointed kopjes and swamps. The big mountain range is near, pressing hard upon the rows of buildings and huts of the settlement.

Here we were not much above the level of Tanganyika, and judging by the nature of the country, it is probable that the lake at one time extended up as far as this point.

There are two races of natives inhabiting this valley—the Walundis and the Wafulero. The Walundis lived formerly on the east of the Rusisi River in German East Africa, but many years ago they defeated the Wafuleros in battle and drove them back to the mountains. Since then they have occupied the greater part of the valley and now claim it as their own. The authorities have considered it was wise not to interfere, but allowed them the conqueror's right of possession. Both races shave their heads, leaving a crescent-shaped tuft of hair on the crown, and they wear many anklets and bracelets. Their spear-handles are very thin and long, and their huts are untidy.

At Luvungi I engaged a fresh batch of carriers, men who were accustomed to mountainous country. We started again and held on along the river through patches of swamp-land for about ten miles. The Wafuleros cut the grass from these marshes and make large heaps, which they burn in a continuous fire. They then collect the ashes, wash them through water, and thus extract salt for their daily use.

The valley now narrowed to a point at the River Luoifi, and Mount Nya Lusangole stood out high above the valley on the left. To the right the rugged and bare ranges closed in. Overhanging the river-banks, and in front, a great pile of mountains rise abruptly, and a 1500-feet climb raised us to the high and healthy country of the Kivu uplands. We followed

the course of the Rusisi River and travelled for some distance in a deep gorge, gradually rising higher and higher past a series of rapids. It was a difficult march, and I sent my carriers with the loads direct up the mountains to the Kamela River, where I had arranged to meet them and form camp. The River Rusisi, which we followed, made such large bends that sometimes we returned almost to the former point, with only an enormous boulder between. There were many ducks on the rocks of the now rapid river, and I shot several, but they were carried away by the stream.

In sharp bends of the river enormous heaps of boulders were stacked, dislodged and piled up by the great body of water when it was many times its present size. Clambering over boulders, under overhanging precipices, round jutting crags, we ascended to a dry spot, with a bank of stones crossing from one side of the gorge to the other. We stood on this natural bridge, with the water rushing under these stones and appearing again on the other side to pursue its regular course. Here we left the Rusisi and climbed westwards over steep mountains, from whose summits we could see in thick confusion a sea of hills, savage ravines, plateaux of grassy plains, frowning precipices, and rounded peaks. These are the healthy highlands which surround Lake Kivu at an average altitude of 5000 feet.

All over these hills there is a dense native population, the Banjabunga race, one of the most industrious in Central Africa. They tattoo themselves on the stomach in three crescent-shaped lines, and each man carries a long knife slung round the neck and hanging down the back. At every turn we saw large and small kraals clustering on the grassy slopes, which are covered with great banana fields. Dotted all over the fertile valleys are green gardens. Great herds of cattle and goats and flocks of sheep graze on the slopes, and milk and butter are plentiful.

This wide area of country is almost treeless and firewood is scarce. The plateau is in every respect suitable for European settlers, and great stretches of fertile land could be utilised with advantage. The climate is excellent and healthy.

We traversed these lofty elevations for two days. In all directions grass was burning, and the sight suggested farm life in the Transvaal. Then we arrived at the southern shore of Lake Kivu. About fifteen miles from that stage we came upon a large gathering of natives in an open space which served as a market-place, whither natives gathered from far and near to barter their goods for blue and white beads and calico. It was an interesting sight. The varied native costumes, the fantastic head-dressings, of which they make a special show at gatherings, the long, thin spears carried with evident pride, the small plaited

shields, and big sword-like knives with cleverly carved and wire-decorated cases slung round their necks and hanging down the back, the jabbering and gesticulating round the fat native women vendors of fish, beans, meat, or round groups of cattle, sheep, goats, or fowls, made a lively scene which I shall never forget.

My arrival caused a great commotion, and very soon almost the whole crowd bolted precipitately with their goods down the slopes. Only a few negroes who had been among "the white man" remained and surrounded me with inquisitive friendliness, and did their best to call the timid ones back. Some ventured to continue their marketing, but the greater part preferred to depart to what they thought were safer quarters. Those who remained, after satisfying their curiosity, joined in a circle round me and began to dance in grotesque and strange movements. This lasted only a short time, and when they had stopped they asked for presents, alleging that, as they had been sweating for my reception and entertainment, they deserved rewards.

XI

LAKE KIVU AND THE VOLCANIC REGION

AND VISITS TO THE CRATERS

AFTER the interesting interruption described in the preceding chapter our march was continued, and very soon we reached the margin of the Rusisi River again. Long-legged storks flew low over the rushing water and crested cranes pranced proudly up and down. Following the course of the river upstream for a little distance over a broad, gradual rise, we reached a plain whence we had our first glimpse of the Kivu waters, with many wild promontories and islands limiting the view.

Soon we arrived at the fine and healthy station of Nya Lukemba, which lies on the shore of the lake, and is laid out regularly in one main street lined with the offices and dwellings, the usual planning of Congo government posts.

It was Saturday, and I saw the interesting sight of streams of natives bringing in food packed in banana leaves for the soldiers. Hundreds came along in large and small parties, sent by the various chiefs,

each with as small a bundle as possible, so as to receive a measure of beads. The whole represented not more than a few loads, which half the number could have carried easily.

In the mountains to the west of this station the natives are not much under control, and I had to exercise much tact and discretion when travelling through their country. They are cannibals, and only a few years ago a Belgian lieutenant from Nya Lukemba marched with a small company of black soldiers to quell a rebellion about twenty-five miles distant. The little band was overpowered and eaten. After a search the bones of the officer were found and brought back to the cemetery at the post.

This mountainous country stretches northwards along the lake, which is about 5000 feet above sea-level, in the centre of a rugged country. It is the most picturesque and interesting of any of the lakes I visited. In its centre is the great island of Kwidjwi. All round the shores are many deep, narrow bays sheltered by rugged and broken cliffs. The bosom of the lake is broken by many islands of varied size and shape, and between them are numerous chasms and channels where storms can rage with terrific violence on occasion.

Every part of the lake is healthy, and no tsetse flies or mosquitoes make life unbearable. Many of the islands are thickly populated, and the natives are

clever in making pottery of a special kind, and also in carving wooden vessels. They make their primitive tools and weapons from iron which they have mined and worked for years on the west of the mountains which surmount these uplands. On these mountains also the bamboo forest stretches in a dense belt from north to south, and joins at its extremity the great black forest which covers the wide region sloping to the basin of the Congo.

Every step along Lake Kivu reveals fresh beauties, and the traveller cannot repress exclamations of wonder and admiration. Green banana plantations amid the rolling grass-plain indicate the neighbourhood of the kraals and recall the homesteads in South Africa with their patches of blue gum trees.

North-west of the lake the natives are of the Wafuma race, whose customs are similar to those of the adjoining Banjabungu. They tattoo the left and right sides of the stomach with spots. Their villages are fairly clean, the huts being arranged in a circle with bamboo screens round the small entrances.

In the wooded kloofs, in the bays where the broad leaves of palms fan the water, may be heard the hum of myriad insects, the calling of birds of brilliant plumage, and the chirrup of the tree cricket, while monkeys swing from bough to bough. North of the lake the towering peaks of the volcanic moun-

tains rear their mighty crests through the clouds which always float about their sides. Here is an extensive volcanic area which is plainly the result of great eruptions, which without doubt had a great influence in settling the topography of the whole African continent, and created enormous and towering piles of mountain masses which may be looked upon as the real centre of Africa, whence all the greatest rivers descend to the four seas. This eruptive area protrudes and forms a barrier in the great Central African depression which is known as the African Graben, and in which the numerous lakes are situated. This depression is a conspicuous natural mark dividing East from West Africa. The flora of the two sides is also different.

These various protruding volcanoes are called the Virungu volcanoes, and according to their near position to each other they can be divided into three groups.

To the west are those that are still active : Nya Lagira, which continues to modify the surrounding country, and Nya Gongo, whose activities have found escape in a southerly direction as far as Lake Kivu.

The second group, about twenty miles distant, consists of a cluster of three of the highest volcano peaks, now extinct. These are : Karisimbi (14,650 ft.), Mikeno (14,574 ft.), and Missoke (12,500 ft.).

Farther east the third group, consisting of Sabingo, Mgahingo, and Mahawaru, is located. Of all these volcanoes the Nya Gongo has the finest crater. Near the shores of Lake Kivu many shrunken and crumbling craters protrude, profusely overgrown by bush and grass vegetation. They form almost a north and south line, and rise gradually higher to the great pinnacle of the Kirungu or Tsha Nya Gongo.

The lava shores of Kivu are shaded by fig trees, and in some parts of the rocky banks the lava flows of different periods may be detected. As in all lava districts, the neighbourhood is extremely fertile. It is also densely populated, especially to the north-east, where the Ruanda tribe lives.

In close proximity at the north end of the lake are three official stations, two of the Congo—Bibandanga and Goa—and one of German East Africa—Kassenje. I made a stay at each of these, making them centres for excursions in various directions.

A great part of this lava area is disputed territory, but this does not interfere with administration, as German East Africa exercises police control over the inhabitants. This border question does not spoil the negroes as a similar question does near the Ruwenzori, where the dispute between the Congo and Uganda has resulted in an arrangement by which no official, Belgian or Englishman, may set foot upon the belt that is the subject of contention. The natives in the

latter case are without laws, and are dangerous and treacherous. Their reduction to law and order will be a task of difficulty and expense.

At Bibandanga I was beset with difficulties. My proposed exploration of the volcanoes was forbidden from this point, so I left for the German station of Kassenje, where I was freely assisted to make my investigations without any onerous restrictions, and two native soldiers were ordered to accompany me on foot. I made the necessary preparations. I bought two sacks of peas to serve as food for my carriers, and we started early in the morning, so as to camp that evening at the foot of the mountain, and to begin its ascent at dawn on the following morning.

We made our way due north from Kassenje, over beds of cooled lava, sunken and hollowed crusts, and strata of lava with upheaped and twisted edges. The sunken parts are filled with fertile soil which is planted everywhere by the natives, and fields of beans met the eye at every turn. Now and then we passed through great fields of bananas, the broad leaves offering welcome shade. Kraals nestled among the rich foliage, surrounded by hedges of thorny sticks.

As we passed a negro market, the natives took fright and scattered in all directions.

Crater kopjes protruded more and more as we advanced, until at last a whole chain of volcanoes, the summits opening into gaping holes round the sides,

covered with bush growth or cultivation, lay on our right. Huts peeped from among the vegetation, the whole framed with the rims of the belched ash-heaps of the volcanoes.

The country dipped and flattened a little towards the north-west, and this brought into our field of vision extensive tracts of growing beans, one field behind the other. Threading our way through the foot-tracks among them, we neared the foot of the towering peak of the Kirungu volcano, which stood out sharp and high before us. We arrived sooner than I had expected at the destination chosen for that day, a spur of the principal summit, so that I had ample time to ramble around before nightfall.

I obtained a guide to lead us through the forested slopes, and early in the morning just before sunrise we began the ascent. I was equipped lightly, but carried my overcoat. The temperature at starting was 65 degrees Fahrenheit. Entering a forest of bush and trees, only few of which were of any height, we began the ascent. The way zigzagged over protruding lava layers and roots of trees in slippery black soil, through festoons and web-like tangles of creepers and blackberries. Although there was no water visible, the soil was moist with heavy dews and there were probably underground streams. The twittering of birds, the cool and refreshing air, and the soothing scents cheered us as we trod upwards under the

thick shadows of the trees. After a 1000-feet climb the bush growth became smaller and scantier, but although the sky could be seen through the tree-tops, no view for any distance was obtainable.

As we attained still higher altitudes the vegetation became rapidly smaller and more compact, and at the second 1000-feet climb, which was very steep and less zigzag, the vegetation was only breast high, chiefly heath, bracken, and everlasting flowers of various kinds and hues. This vegetation continues up to 8000 feet, where a terrace juts out to the south and to a large grass-covered crater mouth called Sahero. The sloping walls are overgrown with high, dark green bushes. Looking down from the brink of this volcano upon the country we had passed, we saw below us an earth-crack towards the south. It has thrust up to each side a ridge, where the fractured lava layers are seen to incline to the right and to the left. In the centre are crater hollows covered with thick grass.

Here we had our midday meal under the shelter of a lava cliff, for the wind whistled and blew coldly around the tapered peak of Kirungu. It was very cold (14 degrees Centigrade), and only one boy was brave enough to offer to accompany me to the top of the volcano, which stood out sullen and bleak, with steep sides at an angle of about sixty degrees. The other natives made a fire, round which they waited for our return.

On all fours we climbed over sharp edges of lava flows and fissures, and came to the bare zone of massed black lava, where the only vegetation was a little heath growing in the crevices. The wind blew colder and colder, and clouds of chilling mists hung all around us.

However, we managed to gain the summit. In the centre is a deep hole about 1500 yards in diameter. The brim descends vertically about 200 feet to a flat level bottom of yellow ashes, in the middle of which is the volcanic shaft, which drops into unfathomed depths.

From the funnel to the outer walls and in the ashes numerous cracks radiate to all sides, and sulphurous fumes rise continually. It was impossible to descend the outer crater to the narrow vent, as the walls were vertical.

On the inner surface of the crater walls the periodical discharges of lava are well marked, and the edges show contorted layers with occasional white veins of quartz. The height of the crater is 13,000 feet above sea-level, and the thermometer registered six degrees above zero. On the summit a small cairn contains a tin box which protects from the weather a thick book in whose pages each visitor enters his name.

The peak is exposed from every side and the wind was fierce. My thick overcoat did not afford sufficient protection from its cutting blasts. Banks of mist scudded past, one after the other, and permitted only

an occasional glimpse of the wonderful panorama below. To the east and north-east groups of greater cratered pyramids stood out prominent from amid a sea of smaller cones. The Mikeno (14,574 ft.), with its sharp-pointed peak and darkly wooded slopes; the Karisimbi (14,650 ft.), with an oval-shaped summit; and the Kissasso (12,166 ft.), with its rounded crest—all heavily wooded with bamboo. Beyond these, farther to the east, might be discerned the blue outlines of Mgahingo (11,400 ft.), and Sabingo (13,830 ft.).

To the north immediately below we could see another crater similar to that passed half-way up, and adjoining it on the north-west the Nya Lagira still vomits fire and smoke, and to the south a series of craters in a descending scale of altitude stretches to the margin of Lake Kivu. The Kirungu crater, however, is the most perfect example along the whole volcanic area. All this area forms the high backbone of Central Africa, and is the largest water-parting of the greatest rivers of the continent.

After spending a short time on the summit examining the crater and the prospect in all directions as well as I could in the drifting mists and piercing blast, I began to descend again. The varied formation of cooled lava enabled me to draw a mental picture of the molten masses at the times of eruption. Some of the lava flows formed basins as they cooled, and these collect and retain water.

When we reached the spot where the other boys were waiting, hot coffee was made hastily, and helped to restore comfort to our shivering limbs. We completed the return to camp by sundown. On entering my tent I found that a swarm of ants were in possession. Although very tired, I could not rest until everything had been removed.

On the morning of the next day we began the return to the German station of Kassenje, whence I had made the mountain expedition. We passed on the way more interesting villages and fields of the Ruanda tribe. It is surprising and refreshing to witness the industry of the negroes all round the Kivu highlands. The Ruanda race especially are energetic agriculturists. Their well-kept fields reminded me of busy and prosperous villages in Europe. The plains as well as the mountain slopes are divided into neat squares, planted chiefly with beans and bananas, and separated by walls of lava, which prevent the water from washing away the fertile soil. The natives not only cultivate for their personal wants, but they also sell their produce in a public market, where busy and animated scenes may be witnessed every day. It is a sight well worth seeing. The crowds of laughing and chattering villagers, the eager and insistent vendors, the haggling purchasers, the infusion of joviality into transactions of buying and selling composed a picture that was

entirely pleasing. All look forward with enjoyment to the market, which is, without doubt, a great aid to native advancement, stimulating their wants and persuading them from their inherent laziness into habits of industry.

Although this lava region is for the greater part without water, the heavy dews and underground moisture sap the crops to a generous harvest. A wonderful provision of nature is utilised by the natives: the fleshy parts of the banana leaves contain water, which they extract by pressure.

Cattle are plentiful here, and the welcome luxury of milk is always obtainable. Another dainty procurable all round the Kivu district is the strawberry. Large areas of strawberry beds are planted at all the stations, and strawberries and cream can be enjoyed as in Europe.

After leaving Kassenje again for the Congo station of Bibandanga, which lies at the apex of a jutting arm of Lake Kivu, we proceeded northwards across a deep curved bay which rounds this arm towards the still active volcano of Nya Lagira, which is 9866 feet high.

The carriers here do not transport goods on their heads. They take broad strips of bark, which they fasten round the boxes. The load is then placed on the back and the bark band is placed round the forehead, after the manner of the Newhaven fish-

A NEGRO WHO HAS BEEN BADLY MAULED BY A LEOPARD

A LEOPARD OF THE LAVA PLAIN

IVORY TRANSPORT FROM THE CONGO STATE

wives. In British East Africa I have also seen this method of transport.

On the northern side of the bay, which is Congo territory again, I traversed lava layers similar to those on the German side. They were sparsely wooded with bush and fleshy undergrowth, indicating the presence of moisture under the lava. The jutting edges of lava hurt the feet of the carriers and they complained very much, but by slow marching we managed to advance twelve miles that day. We camped on a grassy lava hollow, but the appearance of leopards made sleep impossible. Once or twice during the night the whole black caravan round the fire jumped up with frightened screams, expecting an attack every moment. After a while the boys crowded round my tent, where they felt more protected under cover of my guns. The night was too dark and the cracks in the lava layers too dangerous to risk assuming the aggressive. In the excitement the absence of the cook, who had been bravely preparing my meal, was not at first noticed. On inquiring later, no one seemed to know anything about him, except that he had last been seen going to the tent from the fire, when a leopard had also been seen in the grass. We called and searched, but no trace of him was seen again. We could not stay too long here, as no food or water was to be obtained. We marched on into the forest, up and down hills, and gradually rising higher and higher in a north-

easterly direction over the western spurs of the Kirungu volcano.

We threaded our way under the cool shade of the trees, some of which thrust twisted arms upwards from beneath huge boulders, and others had stems burdened with moss and beautiful white and carmine orchids drooping from the highest branches over the dark green soft parasitic growths. The way was often barred by fallen trunks, and by roots and rocks heavy with masses of blooms. Over all was the hum of flying beetles, the weird meowulling of leopards, the chattering of monkeys as they swung from bough to bough, and all the thousand voices of nature.

This beautiful forest lies on a ridge descending from Mount Kirungu, and extends almost due west to the western heights at an altitude of about 6500 feet. It is the highest of the plains and is the watershed of the waters running to the south and north. Lava flows with layers much tilted and distorted have come from the Kirungu and covered the area to the south and west as far as the border of the lake. They are all of the oldest period and date from the first eruption in this volcanic area. During a later disturbance these older layers were forced up from the north, when the Nya Lagira became active, and thus the cross ridge was formed.

As we proceeded to the north-east we emerged now and again from the forest on to lava plains of younger

age. Several gaping cracks showed lava layers exposed on the higher side and with the other side bent downwards. There are also many fissures of star-like form which have been made by pressure from below. A young growth of all kinds of plants woods this area sparsely, and at no distant time a high forest will cover the whole region.

The sharp edges of this young lava made hard walking for the bare feet of the carriers, who preferred to march over the slopes of the older and more decomposed earth crust, where we crossed some small streams, which disappeared again under the rock. It was extremely difficult to get the loads through the tangled vegetation and over boulders, and the situation was aggravated by short rations of food and water. Several of the carriers were almost worn out and began to complain bitterly.

We marched through this area for three days, and, strange to say, found it entirely unpeopled, in spite of the fertility and the occasional presence of water. The natural conditions are as favourable as those of the lands so well cultivated by the Ruandas. There is no doubt that under the lava much water exists, because the vegetation presents such a fresh and healthy growth, and this would be impossible without nourishment from below.

Soon, however, at the foot of the Mikeno we came to natives at the village of Burungu, where the popu-

lation is numerous and belong to the Kibumba tribe, whose territory extends due east. This village was situated on a hill commanding a fine view over the lava plain and of Mount Nya Lagira, while to the right Mount Mikeno, wooded to its summit, towers in the sky, and a stream can be seen on its high slopes flowing down to disappear under the lava. The village provided plenty of food and fruit, and it was necessary to rest here some time to recuperate after the arduous journey. Unfortunately, one of my carriers died at this place. Here we were on a chain which, continuing almost due north from Mount Mikeno, slopes down to the west. As all my carriers objected to cross this plain to the active volcano Nya Lagira (10,000 ft. above sea-level), I went alone.

There are several approaches by which one can get near the vomiting hole, but through the noise, smoke, and the gases it is seldom possible to get very close to it. While I was exploring the neighbourhood in different directions I had an unexpected experience. It was about four o'clock in the afternoon. I suddenly heard a sound like the escaping steam from an engine, followed by a series of explosions. Looking in the direction whence these sounds proceeded, I saw that Mount Nya Lagira had broken out in eruption. Presently there came a thunderous roll under my feet, and the outburst suddenly increased in force and wildness. Volumes

of thick, black smoke, accompanied by masses of white steam, were ejected high into the air, while muffled detonations came from the bowels of the earth. It was an awe-inspiring spectacle—the earth in travail.

Although the wind was fairly strong, the great clouds of smoke were forced almost perpendicularly to an enormous height, and were then blown over the valley to the south-west towards the western mountains of the great African Graben. Explosion followed explosion, each stronger and wilder than the last, accompanied by violent earth tremblings.

After a cosmic disturbance of about an hour's duration, red molten masses of slag were vomited, to fall to the earth again in a terrible rain of fire and ashes. The darkness, which was fast approaching, added to the magnificence and weirdness of this grand display. The whole neighbourhood as far as the eye could reach was illumined by the fiery glow from the molten rain. Playing round the mouth of the crater was a glaring yellow light, which deepened to dark red as the glowing masses ascended, to mingle with volumes of smoke, which was carried by the wind along the horizon. A black rain of cooled slag fell back continuously to the crater's mouth through the glaring light. The lighter particles were driven away by the wind in clouds of smoke and soot, occasionally describing an arc of fire as they fell, and a kaleidoscopic series of pictures filled the sky. To the east the light was reflected on

the dark outline of the Mikeno and Kirungu Mountains, towering silent and majestic over this magnificent spectacle.

As it was already late, I had to return to my camp near Burungu, and my path was flared by the glow of the eruption. Before reaching camp the light diminished, and I could see that the disturbance was abating. In a remarkably short time only a small glow could be seen from the distance and this also soon disappeared. As I entered my tent all was silent and peaceful. The whole eruption had lasted three hours.

On the following day I witnessed the outbreak of a small crater at the eastern foot of the Nya Lagira, but it was comparatively unimportant. The lava ran in red streams, which solidified and allowed other streams to overtake and flow over them. Smoke clouds darkened the air, but no detonations took place, and only glowing masses of lava were vomited. As the ejected lava cooled, a crust was formed round the mouth of the crater and this prevented further overflow. Then activity soon ceased.

The sides of Mount Nya Lagira slope down to a plain of younger lava. This lava appears in blocks and small heaps of minute pieces, under which may be discerned the periodical layers of lava flows, much rent and cracked, and bearing evidence of tremendous earth movements. The whole surface of this young

lava plain is covered with a growth of white lichen, which gives the appearance of hoar-frost.

On the foot of the south and eastern slopes a number of small craters stand out. There the lava flow is quite clearly marked, and smoke and vapours rise in thin bands, accompanied by sulphurous fumes. These small and numerous craters almost form a circle chain on the eastern base of the mountain.

All around are numerous pipes or vents of various shapes, leading downwards, some vertical and some inclined, to undiscernible depths. Some are well preserved, others are broken or shattered by the earth's movements and filled up with slag.

These channels, which have been formed by the explosions, must be considered as the first outlets of an outburst, and lead to the main funnel of the volcano, which they reach at different depths. Through these numerous channels the gases force their way to the surface, together with molten masses of lava. As the pressure from below concentrates in the main channel, its force increases as it nears the surface, and finally the eruption occurs.

The principal crater of the Nya Lagira is about two miles across the top. The crater walls descend vertically to a flat bottom overstrewn with lava debris renewed by every new outburst. On the east side a portion of the old crater bottom has been uplifted by an eruption, and the real throat is situated more to

the west. It seems that at each new outburst it still tends to travel in that direction. At each eruption the east side of the crater is being gradually filled up and the west side is widening. This accounts for the extensive diameter. All the surrounding surface is covered with distorted lava. The vegetation is young, yet one sees large burned tree-trunks, which show that old growths have existed and have been covered by the lava.

Around the crater mouth smoke and fumes ascend through the cracks and at times a rumbling is heard, when the issue of gases becomes more rapid. The fumes of sulphur leave a deposit on the rocks, which are marked by yellow, white, and red colourings. These gases are poisonous and to breathe them is attended with considerable risk.

I had been much fatigued by my climb around Nya Lagira, but next day I felt active enough to ascend Mount Mikeno, the oldest of the extinct volcanoes. It is thickly wooded and has great precipitous cliffs, in many ledges of which trees and grasses find lodgment and sustenance so that the steepest parts have a fair garment of vegetation. The growth undergoes a gradual change as the altitude increases, until on the exposed summit there is only heath and wiry grass.

On the morrow, again, I negotiated Karisimbi, which is the highest volcano in this eruptive group.

It reaches the height of 14,650 feet, and the summit is capped with snow and ice. From the distance it appears a long, massive pile, flattened on its eastern side to a plateau on which are two extinct craters. To the west a bare pointed summit rises into the sky. It consists of detached pieces of rock covered with snow and ice, but it shows no crater mouth. The plateau is overgrown thickly with the vegetation peculiar to these high altitudes. It falls steeply down to a lava plain. The craters on this plateau are filled up with the oxidised matter of the lava and have no outlet for the rain-water, so that swampy plains are formed.

The various layers deposited at different periods show that the outthrow of the main craters has added to the height of these lofty peaks. Thus precipitous walls and wild and savage slopes have been moulded, so that the traveller can trace the processes of nature and wonder at their result. The steep sides of the mountain are clothed with a heavy growth of bamboo.

Satisfied with my mountain scaling, I resumed my march. To the north, the direction my journey now led, the low lava plain extends into a valley, where the winding silver band of the Ruchuru River is seen flowing towards Lake Edward. The most southern source of this river is on the Mikeno Mountain, where streams which we had seen disappear under the lava appeared again lower down in the valley, and,

augmented by still other streams from the east, form the Ruchuru River.

The Ruchuru flows into Lake Edward and then through the Semliki and Lake Albert into the Nile. Thus the Mikeno volcano is the most southern source of the Congo Nile.

This Ruchuru Valley is bordered on the west by a chain of high mountains, which stretches along the western shore of Lake Edward. On the east from the Mikeno Mountain, a high range, which spreads out farther east to a lofty mountainous plateau from 5000 to 8000 feet above sea, also continues to Lake Edward, but there it disperses. In some parts these uplands are thickly forested, especially in the protected valleys. Rolling plains of grass cover the greater part of the area, and cattle and sheep are kept in great numbers by the natives.

On the slopes of this eastern range my way continued over undulating spurs, thickly peopled by the Walundus, a pastoral tribe, who rear many cattle, sheep, and goats.

Along this range the vegetation entirely changes, the forest country giving place to grass-land stretching as far as the eye can see. By the streams high elephant grass grows, among which the natives have made clearings for tillage. Elephants roam about in great numbers, and herds of them may often be seen ambling through the high grass along the slopes into the creeks

THE CARAVAN IN THE RUTSCHURU VALLEY

LAKE EDWARD

A NATIVE BUSY RUBBING WOOD TO GET FIRE

and down to the valleys. Early in the morning they often raid the banana plantations in the time of the fruit, and the natives are powerless against their destruction.

Many ironstone kopjes separated by lava layers rise from these long grass stretches, and severe thunderstorms accompanied by heavy rains often broke our midday's march. In the valley northwards appear patches of short lawn grass, and here and there an acacia tree stands in solitary state. The banks of the Ruchuru River and its tributaries are well wooded. All the valley is a veritable zoological garden, and it is hard to find another place where animal life can be watched with so much ease. Elephants in extraordinary numbers move tamely over the valley and migrate to and from the high mountainous country near the volcanoes. Water-buck, mpala, gemsbok, and many other antelopes graze in great herds everywhere. Around the station of Ruchuru lions and leopards abound in such numbers that it is quite unsafe to venture out after dusk, and the roaring of the brutes round the dwellings and sometimes on the verandahs disturbs the slumbers of the inhabitants. It is of the greatest importance that all windows, doors, or openings should be closed soon after sundown, because, strange to say, these animals will enter a house more readily than a tent.

On the eastern side of the Ruchuru River the Wahema and the Wadusi races live among the Balundus and possess great herds of cattle. The Balundus, however, are only agriculturists, and are regarded as inferior by the other two races. The former came down from the north and settled here without protest, but they have not the strong physique possessed by the other race. Bananas, which they cultivate extensively, they consider their most valuable product. They use the leaves for packing material, for string, for roofing their huts, and for loin coverings when working in the fields. They prefer the fruit before any other food. They cook it green or grind it into flour, and from the ripe fruit they brew a kind of beer called "pompa."

The River Ruchuru, in which hippopotami abound, takes an almost northerly course and meets the foot of the great western mountain chain at Mount Ewali, where it bends north-east to enter the lake. At Mainamoto, its point of entry, there is a hot spring, or rather two springs, where the water bubbles out of the mountain and flows as two small, hot rivulets to the Ruchuru. The water boils and hisses with great noise as it emerges from the heated soil, and in two places it fountains up to a height of five feet. The rising steam can be seen from a considerable distance and it resembles a fire.

In the daytime lions often crossed our path, and

A NEGRO MARKET OF SWEET POTATOES

THE WOMEN OF THE BANJUNGUS

Preparing a meal for my party

p. 134

A NATIVE
With face torn by hyæna while sleeping

HIPPOPOTAMUS
On Lake Albert Edward

IMPALA BOCK
Which are numerous in the Rutschuru Valley

p. 185

at night the carriers had to make huge fires and hedges round the camp for protection.

From Mainamoto we turned westward and ascended the mountains again, through a wild and untrodden way up a step-like series of ravines. The inhabitants of these highlands, who are especially numerous on the top, had evidently watched my approach, and when I gained the summit they showed a hostile attitude. The natives have been avoided by the authorities on account of their unfriendly disposition, and this treatment has made them more offensive. With great difficulty I ultimately persuaded the chief to come and speak with me. I assured him that I wished nothing from him, but only to travel peaceably through his country. He accepted my present and did not trouble me further. He even offered me a guide to lead me to the bamboo forest.

These natives—the Banjungus—mine iron in different parts of the mountains. They break the ore into small pieces, which they pack in roughly made baskets of small and uniform size, and barter with them even as far as German East Africa. They are good metal-workers, and their spears, knives, and axes are cleverly and neatly made.

After satisfactory investigations in this locality I returned to Mainamoto. On the way back I saw many grazing antelopes. Lions sometimes pushed

through the high grass, to our alarm, but they at once disappeared again and hid in the reeds. At night great precautions had to be taken, and the caravan had to be surrounded by hedges and great fires, but the roaring of the beasts both in the distance and close at hand round the camp made sleep difficult. Two of my carriers while fetching water from the river were carried off, and we heard their agonising screams as they died away in the dark distance, but could render them no succour. Lions seemed to be numerous in this valley, as the natives told many terrible stories of the loss of their relatives. A lion who has never fed on human flesh will not usually attack except when driven to bay. He will generally slink away. But the lion who has once tasted human flesh becomes a man-eater and a man-hunter. Habit breeds indifference to danger, and after months in these wild regions I became accustomed to their roaring and proximity.

Great herds of antelopes abound in the Ruchuru Valley—water-buck, duiker, reed-buck, moor-antelope, buffalo, wart-pigs, and hippopotami.

The valley is an old sea bed, and Lake Albert Edward has at one time covered the whole depression. The hot spring Mai-na-moto contains sodium carbonate water, with a strong *schwefelwasserstoff* smell. It has a temperature of 96 degrees Centigrade.

XII

LAKE ALBERT EDWARD AND THE SEMLIKI VALLEY

ALTHOUGH the valley through which I was advancing at the close of the preceding chapter slopes away gradually to Lake Albert Edward, it has a high and healthy elevation, and is suitable for settlement. The soil is extremely fertile, and the grassy slopes could support millions of cattle—a statement that receives confirmation from the herds of game which thrive here in such numbers.

The way from the hot springs already described towards the lake bed lay almost due north, and we passed many antelopes that were remarkably tame, even allowing us to come quite near to them. It was a delightful sight to see thousands of these animals, large and small, carry their great horns with seemingly conscious pride, or stand quietly and inquisitively watching us pass. Up to the distant horizon great droves of them were grazing quietly all over the plains and slopes, and their very tameness and innocence kept my cartridges unspent.

Near the lake the grass-plains are broken by clusters

of bushes growing on mounds. Among them are many euphorbia trees.

The country from the volcanic area up to here has dropped 3000 feet, and the altitude of the lake is 3240 feet above sea-level.

On the southern side of the lake I stayed for some days at a place called Wichumbi, and hired a small native boat in which to visit various points of interest along the shore. The water is very shallow and dirty, and there are numerous marshes, especially in the bays. These swampy lands have a very large aggregate area, and their extent indicates the former height of the water. There are many masses of reeds standing in the swamps and in the lake, forming impenetrable islands, where nest many water-birds. On the sandy shores round the bays and on the dried swamps there is a great variety of bird-life. The marabou bird with its long beak stands knee-deep in the water or struts along the banks, egrets seek shaded nooks where they may dip their bills under water in search of prey, red-beaked and long-legged cranes stalk along the margin, and geese, water-hens, ducks, and multitudes of other small winged creatures add to the animation and beauty of a scene which cannot be forgotten. The southern bank of the lake especially is an ornithologist's paradise. Nowhere in the world have I seen birds in such numbers. Great herds of hippopotami also inhabit the lake and furnish

many unique and wonderful spectacles. They attacked my boat several times, but it was stronger than upon the former occasion, so they did no damage.

The native race called the Wakingwe lives on the shores, and in some places their huts are built among the reeds in the water. They subsist entirely by fishing and cultivate no land. At the mouth of the Ruchuru I witnessed an enormous haul of fish, which are caught in nets placed all along the banks under the overhanging reeds against the current, with circular baskets forming entrances to the nets. The natives preserve the fish by drying them over fire, and they barter great quantities with neighbouring tribes on the hills. The fish caught make excellent eating. They somewhat resemble carp in form and size.

Some ten miles farther up the river a great herd of hippos had taken possession. They were very fierce, and let no boat pass them.

The Wakingwes tattoo themselves with half-moons all over the stomach.

After some days I resumed my journey along the lake northwards for about ten miles, always past open and swampy bays overgrown with reeds and nested by many birds. I came to the village of Ngogoma, at the foot of the mountain chain. From here the lake shores change entirely, and become rugged and bush-clad with mimosa and acacia trees. The slopes

are inhabited by the Watanga tribe, who have circular tattoo marks differing from the Wakingwe natives. They are a lazy and dirty race, hostile to the white man and to the natives who work for him. They rob the natives along the lake shore and retreat into the mountainous country with their spoil.

While climbing these hills I was received with hostility and was often held up in the ascent.

Attempts were made to steal my loads, but by persuasion and strategy I eventually reached the summit, where another tribe, the Wagonzus, made fresh trouble. They were also hostile. Fortunately I happened to be near the chief's huts, and I found him in a good humour. When it was obvious that I was no official they molested me no further.

Marching for about twenty miles along this lofty plateau, much more rugged and rent than the other highlands I had traversed, we descended to the lake again through densely wooded slopes by the Negora River. We came among a more friendly tribe—the Waskwake. We had reached the north side of Lake Albert Edward and the valley of the Semliki. Emerging from the forested slopes, we entered a great tract of land entirely covered with banana trees. We saw a herd of about 200 elephants devastating the plantations in all directions. Pulling and cracking the trees with their trunks, they were swallowing the fruit with keen enjoyment. The natives were

THE SEMLIKI IN OPEN COUNTRY AGAIN

LAKE ALBERT

screaming, shouting, and beating drums to frighten them off, and the noise could be heard from far, but nothing seemed to disturb the calm and unconcern of the huge beasts.

The natives assisted me very much, and in crossing the Semliki River, which drains the waters of Lake Albert Edward, I proceeded along the shore in a northerly curve and arrived at the Congo station of Kasindi, which stands on a rise above the lake.

Near the shores below this station was a camp for small-pox. In the dry upper undulations of the Semliki Valley there are many ticks—an insect called locally "kimbuda" (*Ornethodorus Hubata*)—which cause a fever resembling malaria, but quinine has no effect upon it. The natives suffer severely from this plague, but usually recover after a few weeks of illness. Where white people are afflicted complications frequently result and blindness often follows. The insects resemble the South African ticks and have grey bodies. They burrow into the flesh and suck the blood. When pitching a tent, water should be poured all over the ground both within and around, a measure which prevents their invasion.

From this camp we could see rising from the shores of Lake Albert Edward and east of the Semliki a ridge which gradually ascends to the north and merges into the great mountain group of Ruwenzori, where many ranges are massed one above the other

around the snow-clad peaks in the centre. With the parting of the clouds which generally hang over these summits I obtained a glimpse of this wonderful scene.

The native tribe the Wanandas spreads along the lower slopes of the Ruwenzori and tills the ground extensively. Another tribe, the Wahemas, also from the north, has settled among them. The latter are the pastoral people, but are not very strong, and have a very high mortality.

The Semliki River flows north, through a broad, undulating valley of granite kopjes, grass plains, and forest, round the Ruwenzori group, first to the north-west and then to north-east, to Lake Albert Edward. I traversed this valley in order to ascend Ruwenzori from the west. Proceeding from my camp at the north of the lake in a north-westerly direction, over a small range which forms its utmost southern extremity, I marched down to the Semliki River.

The country which forms the eastern side of this river valley is marked by low, rounded hillocks stretching from the abrupt walls of Ruwenzori to the banks. They are overgrown by high mimosa trees, bamboos, high and short grass patches, and are in parts forested.

The caravan crossed the river, which is about 200 feet wide, in native boats. Sand-banks overgrown with reeds form small islands in the centre, and on

both sides the banks are well marked by washed clay walls about five feet above the slow-flowing current. On its western side a parched grass plain more or less flat was entered, with only here and there clusters of thorn bushes and palms.

In a north-westerly direction across this plain the caravan moved along to the Talia River. On a lofty eminence the mission station of St. Gustav was visited, and from here we could overlook the valley below. In front we could see the wide bed of the River Talia crossing the valley, into which it cuts a deep furrow. Both sides rise steeply to the elevation of the valley. In the dry parts of the bed of this river the natives—the Wasongolas—have built isolated groups of huts and planted banana plantations. In the dark evenings, when no moon shines, numerous elephants roam from plantation to plantation in search of the fruit. From the mission station I witnessed a great troop of these animals destroying a field just below.

From this point I followed the Talia due east until it enters the Semliki, and, crossing the latter, I again struck northwards. We forded the rivers Hudala and Lama, which come down from the Ruwenzori, and are the only two large streams which convey a good volume of water into the Semliki. The country was now more rugged and sparsely populated by the Wahemas. Up and down over strong and bouldered

slopes and granite hillocks, threading numerous rivulets, and on through many ravines where tangled shrubs had to be cut to make a path, we came to the Congo station of Beni. We noticed no tsetse flies on the way.

Beni is prettily situated on the high banks of the Semliki and on the borders of the great tropical forest which covers the valley. The post is well laid out in park-like fashion and shaded by high trees. It commands a magnificent prospect of the valley and the Ruwenzori snow peaks. At Beni the valley has a fairly high elevation, being crossed by a rugged band of hillocks. A little farther north several rapids bring the level of the river much lower, and thereafter the low ridges are covered by dense forest. Elephants abound everywhere up to the forest, but, strange to say, they are seldom seen in the dense vegetation.

XIII

THE GREAT EQUATORIAL FOREST

ON September 15th I entered the Great Equatorial Forest, and the first native tribe I met was the Wabuba. They build their kraals in clearings which they make in the forest and cultivate fruits and cereals, but principally the banana. The custom of the inhabitants in the forest is to build their huts always on eminences, so as to be able to survey the surroundings. These give a cheerfulness to the otherwise gloomy jungle.

Under the shade of the mighty trees I marched for three weeks through the thick tangle of this luxuriant growth. I passed clear and rushing streams, coursing along deep furrows in the cliffs and breaking with their music the silence under the green roof of the never-ending aisles of solemn trees.

Up sometimes to 500 or 600 feet and down again to the former level the way continued. The early morning coolness and freshness soon changed to a moist and oppressive hot-house heat, bringing heavy drops of perspiration to the brows. The dense fleshy shaded undergrowth makes way for thinner patches,

where the flickering rays of the sun shine upon the flowering shrubs that smile their thanks. Here myriads of insects sun themselves, shining beetles creep from under heaps of fallen leaves, and butterflies of vivid colours rest with outspread wings upon bright blooms.

From the hill-tops of Lubangula and Mocca, which are opposite the peaks of Ruwenzori, the finest view of the snow mountains was obtained, over the intervening ocean of tree-tops. Pressing on past villages and bubbling streams, over hoary granite rocks, a five days' march due north landed us at the small and newly erected station of Lese. At a point about an hour's march before we reached the station we came to a regular elephant track through the forest to the Semliki waters, and for a little distance the caravan had to follow it. The animals seem to be fairly tame, and the natives not at all afraid of them. Whenever any were seen in front the carriers simply clapped their hands over the mouth repeatedly while shouting loudly. They continued to march along quite calmly with the loads upon their heads even if they came unexpectedly close to the animals.

In the neighbourhood of Lese, gorillas, small monkeys, parrots, and hawks are numerous. The natives all along the river are great fishers. They sometimes make fences of arrow-shaped sticks right across the water, leaving an opening in the centre

where they place their nets, and so catch the fish. The nets are made from the bark of a tree, and are as cleverly meshed as those of the "white man." For arms they carry bows and arrows and great shields.

The Semliki River winds along in almost circular curves, or divides its waters so as to form wooded islands. On the banks are many swampy patches of land covered with high elephant grass, acacia, pandanus, and stretches of tall, thin-stemmed palm trees (*phœnix*), from the sap of which the natives brew a kind of beer. Here the papyrus plant, which increases as we go northwards, makes its first appearance.

When the water is high great quantities of fish are caught by the natives, who at such times sleep on the water. The Wabubas tattoo themselves in a kind of network on the lower part of the stomach.

From Lese I crossed the Semliki, where I entered the disputed border area between the Congo and Uganda. I wished to strike across to Ruwenzori and through the forest, but my movements were much hampered by the hostility of the natives, mainly due to the extraordinary arrangement between the disputants, who have agreed that no officials of either side may interfere in this area or even tread its soil. The natives have taken full advantage of this freedom

from control and are inclined to be very aggressive. They have even prevented carriers from travelling through. They know they can desert or maltreat a white traveller with impunity, because no law exists for their punishment.

For two days I travelled through this tract southwards, and passed the villages of Rupe Rupe and Kinapa, which are the two last villages that belong to the Wabuba race. These natives are on the horns of a dilemma, and are not sure whether they serve British or Belgians. They were, moreover, disobliging and unfriendly, but did not hamper me to any extent, and let me pass unharmed.

My carriers, whom I had obtained at the Semliki, wished to return, but I could on no account permit them to do so.

The forest became denser, the undergrowth more tangled, and little sunlight could penetrate the thick crowns of the trees. Huge roots protruded through the washed soil, and only five miles' march each day was possible. Clambering down deep washed-out furrows, holding on to the exposed roots to reach the bottom, and climbing up again by the help of branches, made arduous and slow progress.

Pygmies are very numerous in the forest, but they are very shy, and were seen only occasionally. They disappeared at once like monkeys whenever they saw that they were observed.

CROSSING THE SEMLIKI RIVER

NATIVES READY TO SET OUT FOR COLLECTING
RUBBER IN THE FOREST

PYGMIES NEAR RUWENZORI

PASSAGE THROUGH THE FORTIFICATION
INTO THE KRAAL

Clambering up a chain of kopjes thickly forested, we came to the first village of the Wadalinga. Soon after we left the last village our path was barred by large felled trees, making progress again difficult and fatiguing. Presently the way led into the bed of the Lontzo, and we had to follow the water. A few solitary huts came into sight, but they had no inhabitants. Then we entered an avenue of high trees, leading to a wide passage flanked by sticks, and narrowing to a point just large enough for a man to pass the entrance proper to the village.

This passage was barred with cross-sticks which served as a kind of fortification, and my carriers had much difficulty in getting through with the loads. We could plainly see that the tribe was under the influence of the English king of Toro, and therefore of the English. Kiniapa, the sultan of the village, was dressed in European style, and one boy held an umbrella over him as he advanced to meet me. The huts were irregularly placed, and extended for some distance down the slopes and up other rises to the edge of the forest clearing. They were round and roofed by broad leaves of plants, which had almost the appearance of wooden tiles and was very pretty. The roof rested on poles four feet high. The hole which served as an entrance was closed by mats of bamboo reeds and fastened by a bolt of native design and manufacture.

All the inhabitants looked suspicious, cunning, and fierce, an appearance that was intensified by the curious tattooing on their bodies and faces.

In the evening, when the sun had gone down, my two head boys came to my tent and told me to get my guns ready, as the negroes around were blowing their ivory horns as an alarm signal, and that they were advancing up the slopes to take all my goods. I at once called the sultan Kiniapa, but he assured me that there was no such intention. Still my boys warned me not to believe him and advised me to be very careful, so I weaponed some of my carriers with guns and pistols, and to the rest distributed assegais from my collection. Nothing, however, happened, and early the next morning, after a talk with the chief, I asked him to show me the way out of the forest. He said he would do this, but was frightened of the "wahunis," which means revolvers. However, we started, and almost half the village accompanied the sultan, but the members of this voluntary escort dropped off one by one as we proceeded.

Kiniapa led us through a difficult path down to the Lontzo River again, whose bed we followed over many fallen tree-trunks and through masses of creepers. After about four miles' walk the sultan stopped as well as the carriers, as there were many negroes in the thickets ready to fight. The sultan's

advice was to send two of his boys ahead to the next chief, to let him know that the white man had not come to fight, but only wished to travel peacefully through the forest, and to await his answer. We did so. After a while an answer came that he had ordered his people not to fight, so we pushed on carefully, as the sultan Kiniapa did not believe it. The way led up to another high kopje, on which the village stood, and as we neared the top the sultan took out his knife, and looking right and left, said that if they meant to attack us they would do so now.

We came to an entrance similar to that of the last village, and waited for some time to make sure of the attitude of the inhabitants. On looking over the slopes of the thickly overgrown hillocks we could see that the whole population was armed in the bush and the village deserted.

After loud and incessant calling by Kiniapa to the sultan, assuring him that I was no official, the latter sent his son forward. I held out a present of beads for him and one for his father. He approached slowly, and his nervousness made his skin look quite yellow. Kiniapa again assured him that I would do him no harm, but only wished him to show me the road. He agreed to do this, and from all sides of the forest his people, whom I could not see, shouted to him, asking if he were safe. The two sultans,

Kiniapa and Gutimu, then marched with me for about ten miles through dense and almost impassable undergrowth, which often hid the path entirely, until we reached the village of Kinambala.

This village was also empty, but after persistent calling and assurances of our friendly attitude the chief appeared with great caution. I at once made him a good present, and he then ordered his men, who were all fully armed and looked fierce, to bring food for my carriers. This consisted of green bananas and fowls.

From the strain of carrying my loads through this jungle six of my carriers became ill, and I arranged with the sultan to substitute six of his tribe for these and for the former ones to return. At this point the sultans Kiniapa and Gutimu wanted to return, assuring me that the chief of this village would see me safely to the foot of Ruwenzori. I consented, and the next morning another start was made. The new chief, however, did not come himself, but sent two guides.

My sick boys at the last moment preferred to come with me, as they said the chief would kill them when I had gone. The way continued through marshy ground and dense undergrowth, which had to be cleared continually to afford a passage for the loads. After not more than a five miles' march the six boys and the two guides lent by the chief decamped, and it

was impossible to see or to catch the runaways, as the forest afforded such good cover. It was fortunate that the sick carriers had continued with me, as they now willingly took the lighter loads. My position was grave, without guides and my boys ignorant of the country. My carriers were now concerned, and fortunately afraid to leave me. In open country they might all have decamped and left me alone, because the marches were extremely arduous and their strength was sorely tried by want of proper food.

Slowly moving along in an easterly direction, with every boy, even my personal ones, having to carry the loads, the work of cutting down the creepers and branches to make a path fell to me. About an hour before sundown we heard the voices of strange natives. I immediately stopped the caravan, made preparations to resist an attack, and sent my head boy with two others to search for the village. This they soon discovered, and with a supreme effort we arrived just before dark at a little rise, on the top of which we found a number of huts. All were empty, but fully armed natives with spears, bows and arrows, and great shields of hide bound with monkey-skins, could be seen among the trees around.

As darkness was falling fast I decided to pitch my tent and arm all the caravan. One of my carriers who knew a little of the language shouted repeatedly, inviting the chief to come in, but no answer was

received. All around we could hear distinctly the breaking of branches. Arrows were shot into the camp all night long, but luckily they did not come near enough to harm us. It gave me a peculiar sensation to be camped in a village deserted by all the inhabitants and in momentary expectation of an attack in the darkness.

I ordered my boys to make great fires and to march sentry round them. The light from the fires shone on the rifles they carried and this seemed to frighten the enemy, as none ventured to approach. As soon as the day broke my first thought was how to leave the place, but having no food for the carriers, and being ignorant of the right road, I told my boy to call again to the chief and to persuade him if possible to appear and send us food. After a long time the answer came that he would not give me food or show me the way. Then I conceived the idea of seizing the chief, whose whereabouts we now knew.

Five of my strongest and most trusted followers went off cautiously, while the rest shouted and talked loudly, so as to engage the chief's attention. After about an hour they succeeded in arresting him, and when he found resistance useless he walked quietly to my tent. I again gave him assurances of friendliness, and at last he consented to call for food and to show me the way to the mountains. He saw that he was in my power and deemed it better to assist me.

He informed me that there was no time to lose, as many natives from the southern villages were on their way to join him and make things hot for me. He said that about fifteen miles ahead was the head sultan of the whole district and advised me to go to him at once, whereupon I told him that he must guide me there. To this he consented, and with all haste we departed.

Around this single kopje we saw many little huts erected by the pygmies, who are numerous in the forest. They live by hunting and stealing. They levy toll upon all the villages where the crops are good, and are given food willingly by the other natives, who know them to be good shots and therefore fear them. They are very quick and climb trees like monkeys. They become alarmed at the appearance of a white man and run away. At this village I had the finest view of the Ruwenzori yet obtained.

Descending the hill, the chief, whose name was Bundwe, led us along a river-bed in a south-westerly direction, where there was occasional water and a thick overhanging growth of tangled bushes and trailers. Presently we left the river-bed and entered a beautiful part of the forest, where lofty and stately trees domed with dark green crests shaded our way. There was almost no undergrowth, and the condition was a welcome change from the constantly obstructed path

we had followed. Suddenly straight in front of us a small group of dwarfs dispersed with such rapidity that they might have been taken for monkeys. Only one woman with a child on her back could be kept in view, but the others disappeared behind the numerous tree-trunks. As I was anxious to get a nearer view of this pygmy I ran quietly to the tree she had climbed, but although I searched everywhere I could not discover her.

When the caravan came up everyone looked, but none could see any signs of her. After a while one "boy" pointed to a thick branch, to which the woman was clinging, and always moving round so as to keep the branch between us. When she saw that we surrounded the tree she remained still, and almost looked a part of the dark trunk. She had a handful of bows and arrows in addition to her child, which was fastened on her back by a skin.

We left her hanging and resumed our way, which led to a small rise round which great numbers of natives were standing. Each held in one hand a number of arrows and a large shield bound with monkey-skins, the black and white hair of which waved in the breeze, and in the other hand a bow. They shot towards us, but the tree-trunks protected us. Then they rushed about wildly as we drew nearer. I fired a few shots into the air as we halted. Bundwe called to them, but it was some time before

they recognised his voice amid the excitement and shouting. I told him to order them to disperse, as no harm was intended so long as they would leave me alone, but that plenty of guns were ready to be fired if they persisted in hostility. They appeared to listen and agree to this, and soon they disappeared in the forest. Their terrible shouting and wild screaming, which sounded weird through the trees, was suddenly followed by an ominous silence, which gave one a feeling of insecurity and of coming danger. However, we passed on without interruption, and then the chief Bundwe told me that these were advance warriors of the villages to the south, about whom he had warned me that morning. They all offered a stubborn resistance against the white man and his interference. The carriers heard this news with alarm, and although the way was very steep and difficult, they pushed on quickly without grumbling, and with no joking, laughing, or talking. It was a solemn march, no one knowing what trouble was in front.

A short but stiff climb brought us to a wooded range standing out over the forest, and from here we could see what a vast sea of trees stretched around us. Here was the abode of the big chief Mafatale. Passing through patches of bamboo, we arrived at a large square in which stood three good-sized huts, neatly made of bamboo reeds and forest leaves. Bundwe said that the chief lived here, with three head

men, away from the main village. They must have had news of our approach, for the huts were closed and silent. The chief Bundwe had to call out and promise good presents to get an answer from someone. An answer came soon from a small hillock opposite our position, and it proved to be the chief himself. His manner was not friendly, and he was doubtless surprised at our appearance at his village before the arrival of the natives from the south, who were still only on the way. He seemed to doubt Bundwe's promises, and instead of coming in person to receive the present, he cunningly asked that it should be sent to him. I decided to send it. At the same time I told the five boys who had caught Bundwe to go and capture this one also. It was important that I should have him in my power, as his capture would damp the warlike spirit of his people.

As the present was being taken to him, the five strong boys crept low and stealthily behind him. They were upon him before he noticed it. A short struggle ensued. Although he was short, he was of powerful build and very brave. He nearly overpowered my boys, throwing them to the ground like ninepins. I immediately hurried to the spot with the rest of the carriers, and when I assured him that no harm would come to him he grew quieter. I then told him I only wished to get safely out of the forest, and that he must at once make a

signal to his people and to the reinforcements from the south that they must not molest me, but return to their kraals. He came with me to the place where we had been waiting, and taking his big ivory horn which was slung round his neck, he blew a terrific blast to the west over the forest, which echoed again and again in the kloofs around us. Some of the boys who knew the signals assured me that they were as he had promised, and at once their faces brightened, and they crowded together chattering and laughing once more.

While this chief was my prisoner I found that he was the head of all the revolting natives in this disputed area, and I ordered a strict watch over him, a duty the carriers conscientiously performed.

Surrounding the slopes of this hill were many trees with large trunks and wide-spreading branches, where carabas monkeys in great numbers sported. For the night I arranged that the caravan should sleep round the hut where the two sultans slept, two always keeping guard. I kept Mafatale's big signal-horn in my tent. Two other trustworthy boys kept watch round my tent, so that I could have the rest of which I was so much in need, after a week of nervous tension.

The next morning we left this wild and secluded spot, the two chiefs leading the way, but always closely watched. We descended the slopes to the

west. Granite mounds overgrown with ferns and thick fleshy-leaved plants line the deep gulleys running down to the lower parts of the forest, from which the sound of trickling water could be heard.

On the east we saw mountain slopes of the Ruwenzori seamed with ravines, its spurs and kopjes towering one above the other and forming a great chain from south to north. But we were still in the forest, and no view of the snow peaks could be obtained. After fording some shallow streams flowing between large granite boulders and traversing some undulations in a northerly direction, we quitted the forest suddenly and pursued our way through indescribably wild and broken country, covered with tall bamboo grass and isolated mimosa trees. Deep-seamed dongas broke the ground and scattered villages gradually began to appear. Crossing the broad and steep-banked river Luanori, with its boulder-strewn bed, we arrived at the village of Ntese, in the country of the friendly Wananda race. Here I released the two sultans and handed back to Mafatale his valuable ivory horn, which he told me had belonged to the chiefs of his race for many generations. He said that he could not return to his people without it, as they would not follow him or recognise his power unless he had it.

The village of Luanori is laid out in various

circular plots, between which large banana plantations are cultivated. Sweet potatoes and maize are plentiful. A little distance away the margin of the forest is well defined, and large morasses covered with reeds are tenanted by herds of elephants, of whose destructive habits the natives complain bitterly. The lower slopes of Ruwenzori are almost barren of tree growth and elephants abound everywhere.

XIV

THE ASCENT OF RUWENZORI

ON the eastern rim of the great Central African depression, almost on the Equator, a large block of mountains rears its mighty mass grandly into the sky.

To the east of this pile a break is noticeable. It extends from Lake Rusambe to the north of Fort Portal, and is marked by a number of old crater holes, which follow the eastern front of Ruwenzori and turn to the north-east with the northern flank of the Ruwenzori range. To the west an arm of the great tropical forest reaches across the depression and embraces the foot of the mighty mountain.

The Ruwenzori may be looked upon as a great fault mountain, consisting of gneiss and mica schists up to 13,000 feet. Above this the mass is chiefly greenstones. All the other higher summits of Africa are volcanoes.

The peaks of the Ruwenzori are as follows :—

Stanley	16,650 feet
Baker	15,850 „
Speke	15,950 „
Emin	15,649 „
Gessi	15,500 „

The glaciers now commence at 13,650 feet, but according to observations in the Mabuku Valley there are evidences of glaciers formerly existing at 4875 feet.

It was this great mountain mass of Ruwenzori that I wished to ascend. I explained my intention to the chief on the morning after my arrival at Malibi, and he sent round to the numerous adjacent villages to procure fresh carriers for me, as the others, after the experiences in the forest, were anxious to return to their homes by a circuitous but safer route.

About ten o'clock in the morning sufficient carriers were ready to accompany me. They were strong fellows, and carried the loads with ease. We marched about three miles through banana fields to where the mountain rose abruptly from the plain, and commenced two hours' stiff zigzag climb up a track in the grass which led over masses of rocks and slippery clayey soil. We had to hold on to tufts of grass for support. Progressing thus we accomplished about a 2000-feet climb and reached the village of the sultan, Hagama, the chief of the mountain race of the Wakonjos. This tribe lives as high up the mountains as 7000 feet, and their villages are scattered in great numbers on the Ruwenzori slopes. They are the only natives who reside at such an altitude, and no others can be used to carry loads here. The name "Wakonjos" means "sick people." It is appropriate,

because these mountain-bred natives become ill when they descend to the plains.

The surroundings were beautiful and the climate invigorating. The cool, refreshing mountain air induced me to rest for a few days to recuperate after the difficulties and relaxing heat of the forest. The natives were very friendly and assisted me in every way possible. All keep large herds of goats and sheep, and some of them cattle. Fowls and eggs are plentiful. I arranged with the chief for a good guide and several boys to carry only the necessary things to the higher peaks, and sent the other carriers back to the plain, as they could not stand the cold climate.

On the 10th October everything was ready for the ascent. We started along a ridge and soon entered a large ravine through which the River Ruanuli flows, and where many villages nestle in the wooded kloofs. Then a stiff climb up the slippery face of a very steep hill brought us to a height of 7000 feet. Here a few isolated huts were situated and here I formed camp. I could survey the country right and left for miles beneath me. The steep inclines sloping to the forested valley below were ribbed and seamed with dark ravines, some of which twisted round rugged kopjes in irregular windings. Everywhere below was a heavy carpet of bright verdure, with the straw huts of the natives appearing as brown spots. Where I stood it was cold and wet. The wreaths of drifting

mist enveloped us at intervals and chilled us with the penetrating moisture of their drizzling clouds. A biting wind blew and showers fell occasionally.

Mount Kangomo rose in front. In climbing this we entered the forest of bamboo, beginning first with tall, scattered reeds which increased in size and number as we neared the top, where they became almost impassable. On the eastern slope of the mountain one branch of the River Bombe rises and plunges into a steep gully. Beyond this another lofty elevation rises abruptly, clad entirely with bamboos, whose thick reeds stand in close clusters, stem on stem. The decayed canes hung over, and the fallen ones were strewn in disorderly profusion, and covered with moss, ferns, orchids, begonias, and other fleshy vegetation, so that the way was barred, and we found it at last impossible to proceed. For an entire day we skirted this impenetrable mass, seeking a road through the less densely wooded parts, occasionally having to cut our way through with the axe, and as we ascended progress was slower. We found no villages. The Wakonjos who live below on the grassy slopes come up to these heights for the bamboo canes, which they slide down the slopes, and use for building huts, for making cattle enclosures, and for hedges to protect them against the wind. The brown scale-like leaves on the stems near the ground are used for roofing the huts, which look very neat and pretty. These

natives also trap the irex. They wear the skins and eat the flesh.

After several days of strenuous effort we reached another height of about 10,000 feet. From this point we could see that farther advance would lead us into dangerous and impenetrable gorges, up rugged crags and summits in endless succession, and all leading higher and higher, with heavy, dense bamboo growth everywhere. It was impossible to proceed farther, and we had to abandon the attempt to reach the snow-bound peaks from here.

To form camp was also very difficult on the steep inclines, and I decided to descend and attempt the ascent from the River Lami. The rain usually fell here from three to six o'clock in the afternoon, and made the air very clear. In the early morning also it is very clear, and we could see the white mists hang like a sheet over the vast forest land to the west. Then as the sun got warmer the mists would gradually rise and curl round as they met cross-currents, or scud along the summits in the strong winds which usually blow up about one o'clock. We descended in heavy rain to the camp at Hagama, where we changed carriers. Then we set out across the northern spurs of the mountain group over grassy slopes and came to swamps near the forest again.

Near here I visited some low hillocks veined with deep water-worn gullies. A path led through high

reeds which entirely hid the caravan. Presently a whistling sound issued from the tangle, denoting the presence of elephants. They appeared to have been hunted and were much disturbed. They seemed very different from the quiet animals down below. The herd soon disappeared in the forest near by. One animal, however, was behind us, and we were between him and his fellows. He came charging towards the caravan, and the boys in great alarm threw down their loads and scattered in all directions. The animal caught one man and threw him high into the air. I saw him over the high grass. As he came down again, more alarmed than hurt, the elephant seized him again and threw him up. I managed to get through the trampled grass close to the scene of what promised to develop into tragedy and killed the brute after several shots.

News of this killed elephant spread like wildfire among the natives around, and in a few minutes we were thronged with negroes. The men came with knives, assegais, and hatchets, and the women with baskets and curved knives fastened to belts round their waists. All hoped to share in the feast provided by the flesh of the animal. Thicker and thicker they came, and the babel of tongues was deafening. But the carcase remained untouched ; all waited my permission. When I gave the signal to help themselves, they pounced like wild animals upon the dead body,

with terrible howling, pushing, roaring, and disputing in their efforts to get a slice. It was an extraordinary sight. As they cut through the thick skin and came to the intestines the scrimmage became almost a battle. As the entrails were pulled out, each was an object of strife. The men clutched and pulled over the pieces till every one of them was smeared and dripping with blood. One negro even got right into the stomach of the elephant. Many were cut and wounded, but they seemed not to heed. In their mad haste they cut and slashed until in a surprisingly short time nothing was left but the tusks, which were my portion.

After this exciting incident we marched on, and presently saw the rest of the herd moving along the slopes.

We spent a whole day in climbing, but in this wild and rugged gorge, where the strong river coursed round granite boulders and through dense tangle, it was even more difficult than it had been higher up to ascend to the bamboo region, which here extended lower down the slopes. Again I had to give it up. Nature's ramparts were too much for me.

We returned to the lower slope the same day, and then marched straight north from village to village for about thirty miles, where we struck an old path which led over the northern chain of the Ruwenzori group due east to Toro in Uganda. The climb was stiff and

THE ELEPHANT THAT GAVE US TROUBLE

MALIBI

A village west of the Ruwenzori

THE MABUKU RIVER

Whence a fine view of the snow-peaks is obtained

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fatiguing. The road zigzagged along a grassy ridge, through bushy ravines with running streams, and over mountain-tops, appearing in terraces between the Homea and the Lalulu rivers, both of them tributaries of the Semliki.

My carriers were poor climbers, and we took a long time to reach the crest of this ridge. On account of the wet and slippery soil, many boys stumbled, and boxes often rolled some distance down the slopes. Almost up to the summit the slopes are grassy and bush-clad. In the ravines along the summit, which has an altitude of about 8000 feet, the bamboo region stretches. From here we descended to the eastern slopes, where the River M'Panga has its source. This river flows round Fort Portal with a sharp turn to the south, and then, swelled by several tributaries, it flows through the northern swamps of Lake George (Lake Rusambe), thence to Lake Edward (Lake Albert Edward), and through the Semliki and Lake Albert Nyanza into the Nile. All the waters from this slope almost encircle the Ruwenzori group. Our descent was steep, and the slopes, dotted with huts of the Wakonjos, were barren of trees. In a heavy, steady rain we arrived at the foot of the mountain and camped on the Toro plain. We therefore crossed the northern mountain chain in one day. All to the east of Ruwenzori the Wahema tribe were met. This Toro plain is so devoid of tree growth that the reeds are used as

firewood, and rolling grass plains extend as far as the eye can see.

On the following day I marched to Fort Portal, about ten miles distant, over numerous round-topped hillocks rising from the expanse of grassy plain, past several villages and great herds of grazing cattle, sheep, and goats. The plain has an elevation of 5000 feet, and domestic animals thrive. At length we came in sight of Toro, with many huts and cultivated fields spread in a valley leading by a broad road to two hills, on which the European quarter is laid out. To the right a high range has been planted by the missionaries with blue gum and fruit trees, which surround the Protestant and Catholic churches and stations. The "palace" of the king of Toro is here also. I was most kindly received and assisted in every way possible by Mr. Haldane, the Commissioner of the Toro province. He represents the highest type of the British official—is an English gentleman as well as an able administrator.

Here I procured new carriers to convey me to the Mabuku Valley, where the Wakonjos were to take me farther to the mountain. For three days we marched along over small undulations, with many streams, and covered with high elephant grass and a sparse tree vegetation. For some distance we travelled by the main road from Toro to Lake George, and at a point about twenty miles south from Toro we struck off

south-west over higher rises to the village of Butanika, where numbers of Wahema natives had large patches of land under tillage. These natives are very cunning, and resort to many artful devices to draw a present from a white man. They stole my large hat, and when I complained to their sultan, he told me that none of his people knew anything whatever about it. When leaving on the following day I made a great fuss about it, as it was dangerous to travel without this helmet in the hot sun. I made everyone search for it. After about two hours I gave up hope of finding it and departed. Some distance ahead the sultan with a herd-boy stood by the wayside, and said that it had at last been found in a spot we had searched thoroughly without result. He gave it to me, but before handing it over asked for a big present. I gave the boy some shells and sent the chief about his business.

All the natives around Toro are paid in coins of cents and rupees (100 cents = 1 rupee), but they prefer strings of shells as payment even before calico. Beads they do not care about at all. The official rate of payment for a native day's work is 10 cents—about 1d. The men are not good carriers, as they are not very strong. They prefer bartering their products on the market. Their huts are well made and large, especially those of the chief and his head man, which are divided into two parts, the front being a kind

of meeting-place with benches made from reeds round the sides. The back half of the hut is divided into sleeping compartments. They build large cattle enclosures for their many herds.

On the way the carriers worried me continually by pretending to be sick, and at every village they wanted to halt until next day, even if we had done only a short march.

We struck the River Hima and followed its course upwards to the west, then over a range down to the open valley of the Mabuku River, where we came to the kraal of the sultan Mohegosi. I arrived here a good distance ahead of the carriers, who were all weak and tired. I found the chief to be a superior and refined negro, with good control over his people.

I was repaid for the fatigue of the day by a magnificent view of the majestic snow peaks of Ruwenzori. I asked the sultan to send assistance to my carriers, and he willingly did so. His men found them all lying along the road exhausted.

In this splendid climate the cattle thrive well. To all appearance the locality is prosperous, and resembles a well-stocked farm in South Africa. White settlers should do well here.

The Mabuku River is about 100 yards wide, and its waters rush with wild turmoil over the granite boulders in its bed. It rises to flood very quickly

after heavy rains on the mountains, and is fed by many tributaries from the snow peaks above. Even when it is low the crossing is not without difficulties.

We found ourselves again in the land of plenty. The chief supplied me with much food, bananas, milk, and eggs in abundance. He also brought me a sheep, but of course a present demands a return present, sometimes of greater value.

I crossed this river to re-enter the territory of the Wakonjo tribe in order to procure carriers, and the next day the Toro boys returned from the village of Korokoro, which is about half an hour's walk on the other side, and on the south of the Mabuku River. The water was fortunately low, but several strong boys sent by the sultan had to help my carriers one by one through the strong current, where the water was icy cold. They carried me across.

In a wide bend of the valley and at the base of the mountain the kraal was situated. The hut of the chief was very roomy, and I could walk about within comfortably. It was lined inside with bamboo reeds, which gave it an attractive appearance. The chief himself was very big, stout and dignified, and his people seemed well under control. He promised to get for me sufficient Wakonjo boys as carriers, all the food necessary, and a good guide who would lead me up to the snow peaks, but he desired a full day to enable him to send round to the different moun-

tain villages to get good strong men. The next morning early the band arrived as promised, and we started at once.

I sent ten boys in advance to cut a path through the high grass in the valley, and then a stiff climb up and along a ridge carried us one stage to an elevation of 7000 feet, where we found a suitable camping-place. The natives made themselves shelters in a very short time from banana leaves. From about three o'clock in the afternoon torrents of rain fell for three hours, after which the sky cleared and the snow peaks were again visible.

At this elevation the slopes are all clad with bush growth. The next morning early ten boys advanced again to make a way, and, following them, we descended a bushy slope for about 500 feet to the River Zora, a tributary of the Mabuku. Then under large forest trees and through tangled undergrowth we moved gradually upwards again to a broad range, and soon emerged from the forest upon open country covered with ferns taller than ourselves. The advance gang parted the leaves, and soon a path was trodden for the rest of the caravan.

Continually rising at an angle of 45 degrees, we reached the bamboo zone again at the height of 9000 feet, but the clusters were more scattered than on the west, and afforded room for other growths of shrubs, ferns, and orchids.

On the left, slopes broken by wild ravines led up steeply in the same gradient as the ridge I was on, but to the right was a sheer drop to the wild torrent of the Mabuku River. Beyond, peak rose over peak, to the mountains called the Portal Peaks. Climbing over jagged boulders overhung by grass and orchids, we came to a bold, overhanging granite boulder called Konyote, under which there was room enough to pitch the tent. A good day's climb had been accomplished, and I selected this place to rest for the night. From the seclusion of this beautiful spot frowning summits loomed darkly through the branches or were hidden by the driving mists. The soothing murmur of the rushing waters of the Mabuku sheer below ascended to our ears, and birds called to their mates as they flitted back and forth. The lory with his scarlet wings was the most brilliant of the feathered choristers.

As we wound our way upwards next morning the early sun sent its slanting rays through the high trees, and the mighty mountains showed their white crests high in the clouds. But soon the view was hidden by the thicker forest growth, and the "boys" grew weary with the toil of cutting a way through the bamboo canes. After three miles' marching a small descent brought us almost on the level of the river, whose bank was reached after much difficult walking over swamps, fallen tree-trunks, and rocks

overgrown with grass and moss. The waters were swollen high and icy cold. The crossing was very difficult indeed, and much time was lost before the whole caravan reached the other side. To add to our discomfort, a heavy rain began to fall, and the cold wind made us shiver in every limb. The boys began to lose heart. However, we found a shelter under a rock where it was dry, and a huge fire was soon burning. Around this the boys made themselves comfortable. When the rain ceased we pressed on again over hoary and rugged boulders, under patches of bamboos, and down to a swamp overgrown with moss and reed and small bushes of erica, into which we sank often knee deep, and came to a waterfall of the Mabuku.

All around the precipices walled us in, and to the left and under a great overhanging cliff called Kitchuchu we camped wet and exhausted. Although morass surrounded us it was quite dry under the rock, and the heavy rain which again poured down in torrents could not reach us.

At sunrise on the following day we scaled a precipice inclining 75 degrees, where on hands and feet and sometimes with ropes we ascended 1000 feet in about an hour. It was surprising to see how carefully the boys managed the loads without a single accident. From the top another broad, flat valley or terrace stretched before us and through it coursed the Mabuku

River. On both sides chains of mountains with pointed summits and sides veined by rivulets border it. Here the forest growth is remarkable. Trees of heath up to forty feet high cover the terrace. They must be of very great age, for their bent and twisted stems are covered with great clumps of moss between which ferns protrude. It looks like a dead forest. Decayed stems seemingly of great age are covered with mosses and stand out like tombstones. Huge masses of creeping and parasitic growth hang down in all manner of weird forms, and fall down from time to time on the deep layers of fallen trunks which lie like stricken corpses on a field of battle.

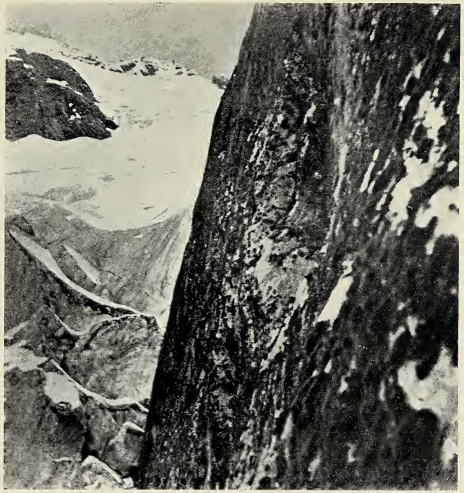
Through incessant rain and over ground becoming more and more slippery we came to a mound of rocks in the forest called Katchevela. Ice-cold swamps made my boys give up, and putting down the loads, they shivered and said they would die there. I was forced to form camp on this mound, which was the only dry spot around.

I decided to keep three strong and hardened carriers, and to send the rest back with instruction to return two days later to fetch their loads, which were to remain. The next morning I sent my guide to see if any boys were coming with the food which the sultan had promised to send, but he returned disappointed. I was placed in a difficult position. Either I had to give up the attempt to reach the Ruwenzori snow

peaks, or I had to push on quickly before my small stock of provisions gave out.

I selected only the absolutely necessary things, which included my sleeping-bag, and I left the tent behind. For some distance we marched west through the valley, wading continuously through the cold swamps, till we came to a small rise covered with masses of fallen and decayed tree-trunks, lying across each other at all angles, with here and there a boulder of granite protruding, and the sodden, slippery moss thickly wrapped all over them. Climbing over these, balancing ourselves along the trunks, and sometimes stepping into big holes, we clambered along thus for nearly an hour and then crossed to the right bank of the Mabuku. It was extremely difficult for me to labour across these slippery, cold, piled tree-trunks, and I was surprised that the carriers with their loads managed it at all. We reached the end of this valley, and before us was another steep wall where the Mabuku River descends wildly in a series of rapids. On its right bank where we stood a less abrupt ascent enabled us to zigzag upwards. During the climb a heavy mist enveloped us and a drizzling rain soaked us to the skin.

A climb along a dangerous brow landed us upon another terrace, where the river flows level between high mountain ridges, and at a distance jutting rocks rise wildly to the snow peaks which we could see beyond.



THE MABUKU GLACIER

CAMP LAMBAMBE

With waterfall

THE ASCENT NEAR THE MABUKU GLACIER

Tall-stemmed lobelia stand like sentinels solemnly guarding the grey bushes of helichrysum with white everlasting flowers and huge senecios. This curious compact vegetation of Alpine character gives the valley a singular appearance. We pressed on over sodden ground strewn with pieces of rock along the margin of the river. Gigantic moss-covered boulders increased in numbers as we proceeded, and the valley, which began to slope upwards, became more rugged.

For a brief space the mists cleared and a wonderful picture of the snow peaks was unfolded unexpectedly near. This renewed my courage. The mists closed round us again, and we presently came to a large, well-protected shelter called Lambambe, under an overhanging cliff over which a fine waterfall rushed. Being cold, tired, and hungry, for it was late in the afternoon, we rested here. I gathered wood from under the dry rocks and made a big fire, as the carriers, who had been coming more slowly behind, would be in need of its warmth, as it was bitterly cold, and a piercing, icy wind blew.

In my sleeping-bag by the side of the fire I passed the night as comfortably as the circumstances allowed, and just before dark I was rewarded with another glimpse of the snow summits.

The next day, the 29th October, two hours brought me to Kutjongole, the last shelter nearest to the snow peaks. The altitude was now 13,500 feet. The morn-

ing was beautiful and clear, and over two steep walls of rugged cliffs and boulders we ascended again to an irregular and broken valley, flanked or skirted on both sides by pinnacles, some snow-capped, and under a projecting rock we made a rest. Looking backward down the winding silver stream, we saw a creeping bank of mist approach between the two mountain walls, but suddenly a wind arose and we were entirely enveloped in a surprisingly short time. This lasted a whole day.

Just opposite the camp Mount Kinamgoma with three snow-clad pinnacles was occasionally visible. As we arrived early in the day there was plenty of time to make plans for the morrow's final climb and to investigate the neighbourhood. The refuge here was one of the finest natural protections against wind and storm I have encountered. Over 200 people could find in it dry shelter without getting a drop of rain. Under the huge boulders large ruts harbour numerous hyrax, and leopards were once or twice heard. Painted in red on one face of the cliff is the date of the visit of the Duke of Abruzzi.

We rose very early the next morning, and in company with my guide—who was anxious to see the snow—I made a start to climb the snow peaks, which now faced us clear and distinct. We still continued over swampy land and often sank knee deep into mud. Rounding a projecting arm, we entered the

fourth terrace of the Mabuku River, and a singular vegetation was revealed. Clusters of curious rushes, evidently of great age, stand in the morass, as if Nature had provided these as stepping-stones to ford the swamps. The Mabuku River continued in a network of streams, and the vegetation got always more scanty as we neared the dull white face of the glaciers before us.

After about one hour's walk a great boulder of schist afforded a small shelter among the otherwise smooth surface of glacier and water-worn rock face. The guide would not venture farther, and making a fire, he sat under the shelter. The sharp rocks cut his feet badly.

I continued alone. Fifty paces ahead lay the large glacier, forming shining green ice pinnacles with deep rents, down which one could see the running water below. On both sides were steep precipices rising perpendicularly from this ice mass.

To the left a gorge with rounded boulders afforded the only means of ascent, and cautiously clambering over the ice and snow on and around the rocks, I made a strenuous effort to reach the summit before the usual afternoon clouds appeared. Twice I had to make use of my rope to ascend a steep face. My feet were already stiff with the cold, but I still had another 1000 feet to climb to a grey crest sprinkled with white snow patches. Boulders barred the way,

but after infinite toil over a solid mass of rock I arrived breathless at the top. Here I was able to view all the many great snow peaks which cover the highest area of the group. To the right there is a sharp drop, to the west a fine panorama consisting of a circle of three clusters of snow mountains crowned with peaks of varied heights.

By descending the Mabuku glacier, ascending a rocky saddle with snow patches, and crossing a field of snow newly fallen, I had little difficulty in getting nearer to the snow-clad peak in front. As I observed the clouds of mist approach from below, I hastened to struggle up to the summit over rocks projecting through the sheet of snow, and I was just in time to reach the summit, 16,500 feet high, to get a glimpse to the west over the great glaciers that feed the tributaries of the Semliki. I also had a brief glance over the magnificent picture of the snow peaks to the north, when a piercing wind swept the mist along in clouds and the picture was lost. For six hours I laboured continuously over ice, snow, ice-crusted hollows, freshly fallen snow, and patches of sodden soil with black rocks covered with mosses. In the white sheet of mist I hurriedly descended towards the Moore Peak. The temperature was 26 degrees Fahrenheit at three o'clock in the afternoon. In climbing down by the help of the rope it broke, and I saved myself by sliding down on my hands to a big rock.

THE STANLEY PEAK

From the west precipice of the Mabuku glacier

P. 232

ANAKUBI

On the Ituri-Aruwimi River, Eastern Congo. The Irek trees are one year old

With bleeding hands my only hurt, I got back to the path by which I had come, and arrived safely at the stone shelter, where I found my guide with another guide from the Congo, who had arrived meanwhile from the Kitchuchu camp, curious to see the end of the adventure. He was very pleased, and with a smile on his face, produced from his pocket a piece of ice, and when I asked him what he would do with it, he said quite seriously that he would take it to his brothers and his master to show where he had been. We hurried back over the way we had come and reached the camp again. I was satisfied with the result of my journey.

In the camp I asked the boy for his piece of ice. He felt in his pocket, and was surprised to find that it had melted, and he was only wet. I found that all the boys had returned carrying food and prepared to fetch the loads as instructed. This satisfactory outcome of my plans pleased me very much.

From here in one full day we marched to the sultan Korokoro, from whose village it had taken four days to make the ascent. The weather was splendid, else we could not have done such a long march in that time.

The River Mabuku was rising and it was impossible to cross for two days, and so I was glad to take an enforced but much-needed rest.

XV

UGANDA PROTECTORATE

TORO, SOUTH OF LAKE ALBERT

ON the third day after my arrival at Korokoro the current of the Mabuku was still strong and high, so I followed the course of the river downwards and succeeded in crossing it at a broader part where it was less risky. At the camp of Lubona I met Captain Wangormée and Professor Dahalu of the Border Commission.

In Toro I stayed several days to recuperate after the strain of the preceding two weeks. During this time I made visits to several of the numerous extinct volcanoes which form the high ridge running from east to west north of Fort Portal, and probably forming a continuation of Mount Elgon. Round-topped craters are dotted along the chain, and in one of them a lake has formed. These craters continue in round hillocks along the foot of the Ruwenzori group past the west shore of Lake George.

On November 12 I left Toro and marched along to the east of Lake Albert. I followed the road to Entebbe for three hours, and then past swamps

covered with papyrus, over undulating country devoid of trees, and crossing the range of volcanoes, I camped at the village of Kitjula. The natives here own many herds of cattle, and their villages are surrounded by hedges of poles with bamboo gates. Lions are supposed to roam the neighbourhood, but I saw none.

To the north the waters of Lake Albert were visible in the distance from the plateau on which I stood, and which has the same level as Fort Portal (5000 ft.). I crossed the Musisi River and visited the fine falls there. Then I descended the escarpment which runs along from the northern slopes of the Ruwenzori to the north of Lake Albert, where the high country gradually flattens, to the lake itself. Here I spent several days searching for fossils. On the lake, where precipices of mica schist occur almost on the water's edge, I hired canoes and went south to the Semliki Valley. On the sandy banks by the way scores of crocodiles lay basking in the sun, and hippopotami were also numerous. At the southern end of the lake and in the valley large swamps are covered with papyrus, which it was sometimes very difficult to penetrate. In some places it was so thick with "sud" that we could walk on it, whereas in other places the carriers sank through it deep into the water. The natives make regular tracks through which they can bring their boats to the land.

Near the escarpment, where the valley rises a little, sandy plains, with scraggy, short grass and bushes, unusual in these low regions, lie quite dry and seem to be sterile. Great herds of antelopes are exceptionally numerous. The valley south is veined by several streams, which come chiefly from the northern slopes of the Ruwenzori group and the eastern escarpment near by. Where they enter the lake they form enormous swamps overgrown with reeds and, in places, papyrus.

For two days we traversed these swamps with great difficulty, and in several places the tsetse fly was met again.

We then came to the Semliki, which we crossed in order to ascend the escarpment to the west and enter the high country of the Congo.

The Semliki Valley north of Ruwenzori is a vast grassy plain between the two high mountain walls, with small undulations and mounds of granite outcrops.

The Semliki River lies deep under its banks, which are overgrown by high elephant grass. The escarpment to the west is scored by deep and wooded ravines and broken by jutting arms, and it rises to an elevation of 7000 feet, forming the watershed of the Nile and Congo. To the south and south-west these hills give way, and there the great Congo forest breaks through across the valley to the foot of

Ruwenzori. On the north-west a plateau extends, and the country becomes open grass land. This is a cool and healthy district, and inhabited by cattle-owning natives.

I had now left behind me the great British Protectorate of Uganda, which is at the moment attracting so much deserved attention, and before passing from the subject I would attempt to give some indication of the present position and prospects of the great territory.

Uganda was first opened up by missionaries in 1877. Christian and Mohammedan vied for influence and power, so that Uganda became a land of religious strife. To-day the Christian missionaries are stronger than in any other country of Africa. They began their work among tribes whose chiefs perpetrated the cruellest atrocities, to which even to-day thousands of mutilated natives bear witness. The great Baganda chief Mtesa could not be persuaded to abandon his cruelties. His son and successor, Mwanga, began his reign by a series of atrocities even crueller than those of his father, and the English Bishop Hannington was one of his victims in 1885. The missionaries had at one time to leave the country. They were powerless to suppress the cruelties, and, indeed, the natives suffered more during the early days of missionary work than before the missionaries had appeared in the country.

It is difficult to believe the depth of revolting savagery to which Uganda chiefs descended in their treatment of enemies and even of their own subjects. They would cut limbs and portions of flesh from their living victims and throw the pieces into the fire before their eyes. Mutilation by cutting off ears, arms, hands, fingers, noses, lips, legs, or feet was a common form of punishment, and even to-day old natives who were the victims of such treatment are not uncommon in Uganda. Mwanga persecuted and tortured Christians and Mohammedans alike. He even conceived the mad design of massacring his bodyguard, which was composed of both Christians and Mohammedans. This was the beginning of his downfall, for insurrection broke out and he had to flee. His brother Kiwewa was made king, and the land was partitioned between the Christian and Mohammedan population.

A little later quarrels between the adherents of the two creeds developed into war, in which victory fell to the followers of the Prophet. Many Christian chiefs were killed and others fled across the southern border with their missionaries. But the Arabs became displeased with Kiwewa, who had not been so pliant as they wished, and they deposed him, setting up in his place his brother Karema, who at once declared himself a convert to Mohammedanism.

Meantime the deposed Mwanga had not been idle. He had been converted to Christianity by some French missionaries in what is now German East Africa, and, aided by the Christian party, he made war upon Karema, finally defeating him in a decisive battle, and regaining possession of Mengo, his capital, on October 11th, 1889. Most of the Arabs fled from the country. But again came a war of creeds, this time between Catholics and Protestants, and "Christian love among the Churches seemed the twin of heathen hate." British attempts to obtain a footing in the country complicated the situation. The atmosphere was cleared by the partition of the country among the adherents of the different creeds, the Protestants receiving two-thirds of the whole, and the Catholics and Mohammedans each receiving one-sixth. British efforts for the predominating influence in the country continued, and in 1890 the British East Africa Company obtained a hold that was not withdrawn or relaxed until 1894, when a British Protectorate was declared over the territory. Several times since then the area of Uganda has widened, until it now extends from the fifth degree of north latitude on the north to the German frontier and the first degree of south latitude on the south; from the eastern boundary of the Congo Free State to British East Africa and Lake Rudolph. Thus Uganda has reached the limits of territorial expansion,

unless for a possible encroachment upon or amalgamation with British East Africa. The entire area of Uganda is about 223,500 square miles, so that it is almost four times as large as England and Wales. Politically the country is divided into five provinces —the Eastern Province, the Rudolph Province, the Northern Province, the Western Province, and the Kingdom of Uganda, to which pertains many islands in Victoria Nyanza.

The chief executive authority in the Protectorate is the Governor and Commander-in-Chief, who resides at Entebbe. He is represented in the different counties, of which there are twenty, by commissioners.

The "Kabaka," or king of Uganda, is at present a minor named Dandi Chua, who is under a regency of three chiefs, and is being educated by an English tutor at the expense of the British Government, who also make him an annual allowance of £650. The native council of Lukiko is composed of eighty chiefs. These chiefs are encouraged or trained in the practice of pacific government by the British administration, and their powers and revenues are regulated by treaties.

One cannot survey the present condition of Uganda without passing a tribute to the good work that has been achieved under British authority and guidance. The cruel atrocities that cried to heaven for redress

only twenty-five years ago are now things of the past. The wars of jealous chiefs and contending creeds have been stopped, and British justice holds the scales even and punishes crime with impartial judgment. With the security afforded to life and property under the new order, great advance has been made in the arts of peace. The railway runs from Mombasa on the East African coast to Port Florence, a settlement on the largest bay on the north-east corner of Lake Victoria Nyanza, the total length of track being 584 miles. Several trading and passenger steamers plough the waters of the lake, and encourage commerce and industry. The people excel in mechanical arts when their inherent abilities are developed by instruction and practice. The natives of Uganda proper make excellent ironworkers and carpenters.

The Baganda—literally "People of Uganda"—originated from the Bantu race. When the Wahema wandered south they were probably much intermixed with them. Here, as in every district where the Wahema settled, they have become owners of cattle and cultivators of the land. Those of them who come into contact with white people always wear a long white garment after the Arab style of dress, decorating it with gaudy colours. Their staple food is bananas and plantains, of which there are over one hundred varieties. Their manner of eating is simple and practical. A number of them sit round a large

pot, and one of them deals out portions and hands them round. Each recipient receives his share on a part of a folded banana leaf, and rolls it into sausage shape ; then dipping it into the gravy-pot, he devours it with guzzling and noisy relish. They like to eat food as hot as possible. They make a kind of beer from ripe bananas, and use the fibre from the banana to make into ropes. The leaves serve as paper and as a thatching material, and are also woven into mats.

The Mohammedan natives are generally more crafty than the others. They will not eat meat killed by an individual who has not been circumcised, or which has not been killed with its head pointed towards the sacred city of Mecca. Of pigs they seem to have a horror, and often kill those of their white masters. The Bagandas make excellent cooks, and can wash and iron well.

The native population of Uganda is decreasing rapidly, chiefly on account of the terrible sleeping-sickness, which I have described elsewhere. The average annual deaths in Uganda Kingdom alone was 103,053 from 1903 to 1906, and the average births during the same period was only 40,406. From 1901 to 1906, 200,000 people are reckoned to have perished of sleeping-sickness on Victoria Nyanza alone. The decrease of the population is responsible for the deficiency in the labour supply, which is becoming ever more acute.

The average altitude of Uganda is, roughly speaking, about 800 feet above sea-level, and that is the altitude of Lake Victoria Nyanza. There are many plateaux, some of which have altitudes as high as 5000 feet. The average temperature is about 82 degrees Fahrenheit. There are two rainy seasons—a severe one from March to June, and a less important one from October to December. These vary somewhat in time according to locality.

The soil of Uganda is generally very fertile. The Kingdom of Uganda has especially great timber wealth, which includes ebony and rubber trees of good quality. But the cutting of forest timber is not at present a profitable industry on account of the poverty and high cost of transport. This condition will be modified with time.

Both rubber and fibre have good prospects. The natural native rubber has almost disappeared, although it is supposed that there is still some left in the Mabira Forest. Most of the rubber reaching the markets of the world through Uganda is smuggled from the Congo Free State by traders. Other products, either indigenous or introduced, include coffee, copal, and gum arabic, shellac, ground nuts, castor and other oil plants, cotton, and indigo. The last two grow wild, but cotton cultivation is expanding and proving remunerative. The chief mineral is iron, which is found everywhere; but copper is found in the

Kingdom of Uganda, and alluvial gold has been found in limited quantities. Other minerals include alum, graphite, coal-shale, and mica. The principal exports consist of cotton, skins, ivory, coffee, rubber, and chillies. The general duty upon imported merchandise is 10 per cent of value, but machinery and goods for use in industry are admitted free of duty.

There are in addition several export duties, and their wisdom may be questioned. Five per cent of value is charged upon all cowries and other sea-shells, ebony and other fine woods ; 10 per cent upon borities, chillies, hides, rhinoceros horn, hippopotamus teeth, tortoise-shell, ostrich feathers, and india-rubber ; 15 per cent is charged upon gum copal, and ivory ; and 30 per cent upon cloves.

Uganda is eminently suitable for white settlement, but white settlement is slow. In the whole country there are 450 Europeans, including missionaries, traders, and officials. The missionaries have obtained a firm footing in the country and have become political powers. If difficulty were to arise with the natives, an event which seems remote, the missionary white would be a much more potent influence to secure a settlement than the official white. Yet with such a sparse white population the trader can make his way through the country only by securing the goodwill of the natives. Thus diplomacy and

tact are requisite, and too much reliance must not be placed on law in a land where the enforcement of law cannot well be strained to its technical limits.

Many of the natives are clever housebreakers, and their latent skill in handicraft is turned to a nefarious end in this direction. The common method of procedure is to remove a few bricks from the wall of a house and so gain entrance. If the brickwork prove too resisting the clever burglars pour paraffin upon it, and this softens the junctions. All whites—traders, officials, and missionaries—as well as the natives themselves, have suffered from such delicate attentions.

During my journey through Uganda I could see that the power of the chiefs is great and that their commands are obeyed. The British Government exercises rule through the power of the chiefs, and this is indeed the only method that would be possible without an army and a heavy annual charge. To attempt to rule the natives direct would be to set up an alien authority to which the natives would become accustomed only after much trouble, and it would also drive the chiefs into opposition ; whereas, by enlisting the self-interest of the chiefs upon the side of white rule the government is carried on under a practice established in tribal history and hallowed by custom. The policy of the British Government in Uganda is characteristic of this general colonial policy, and it is

in contrast with the policy of other colonising powers. Certainly the countries of Central Europe tend to govern too much ; but if the British err, it is on the side of governing too little. British government has a civil basis as its foundation. Colonial government by other countries has a military basis as its foundation. The British system undoubtedly yields the best results. It leaves greater liberty for individual action, and does not wrap the arms of enterprise in a winding-sheet of military regulations.

In Uganda, commerce was formerly carried on almost entirely by barter, but for some time rupees and cents have been used as a medium of exchange and are gradually becoming universal. The rupee is worth 1s. 4d., and a 6 cent stamp represents one penny. The silver coins are 1 rupee, half-rupee, 25 cents, and 10 cent pieces. The single cent pieces are made of aluminium with a hole in the middle, which pleases the natives, as they can thread them on strings and hang them round their necks. The native, however, still prefers the old system of payment by cowrie-shells, and if he receive money he at once changes it for shells, being careful that he receives the right amount.

The postal system is well organised, and Nyanza offers the quickest route to Europe from the interior far and near. Indians are generally engaged as post-masters. The Parcel Postage rate is 3 lbs. for 1s.,

and letters 6 cents (1d.) to England, to foreign countries 12 cents (2d.) The mail in either direction between Uganda and Europe is delivered nineteen days after despatch.

From Lake Victoria Nyanza the mails are carried by relays of native runners.

XVI

ALBERT NYANZA AND THE KILO GOLD-FIELDS TO GONDOKORO

FROM Quesi I advanced north-west towards Irumu, up and down gentle inclines and over streams whose sources are on the escarpment of Lake Albert Nyanza, and which course through deep and wooded gullies, the vegetation forming outspreading arms of the great tropical forest. On the rising parts only grass covers the surface.

The natives were very numerous and belong to the Walene tribe. Their character is different from that of the tribes with whom I had recently come into contact, and their customs, to which they faithfully adhere, are distinct. In some places swarms of these natives were seen from a distance on the hills. On approaching I learnt that they were catching green locusts, which they eat and consider a great delicacy. When the locusts appear, the whole kraal—men, women, and children—turn out to catch them. When cooked, the fat is skimmed from the surface of the dish and is specially relished.

Occasionally, passing through patches of forested

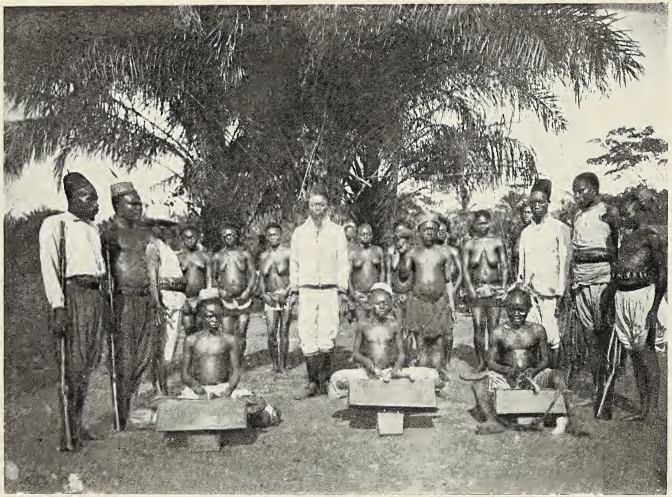
BELGIAN CONGO

One of the camps at the Kilo Gold Mines

BELGIAN CONGO

Transport of gold alluvions

Kilo is near Uganda and on the projected and already surveyed railway line from Stanleyville (on the Congo River) to Mahagi (on Lake Albert)



ORCHESTRA OF THE ITURI NATIVES

land, we went through villages peopled by strong and healthy natives. Ten miles from Irumu the geological nature of the country changes, and horizontal layers of bluey-grey shale were met frequently.

On November 22 I arrived in Irumu, and here my collections sent from Beno were waiting. I arranged to have them transported to Entebbe, and thence to Europe, but I had to wait over a year before I received them.

My intention was to visit the Kilo gold-fields from Irumu, but here again I was informed that I would not be allowed to see them without permission.

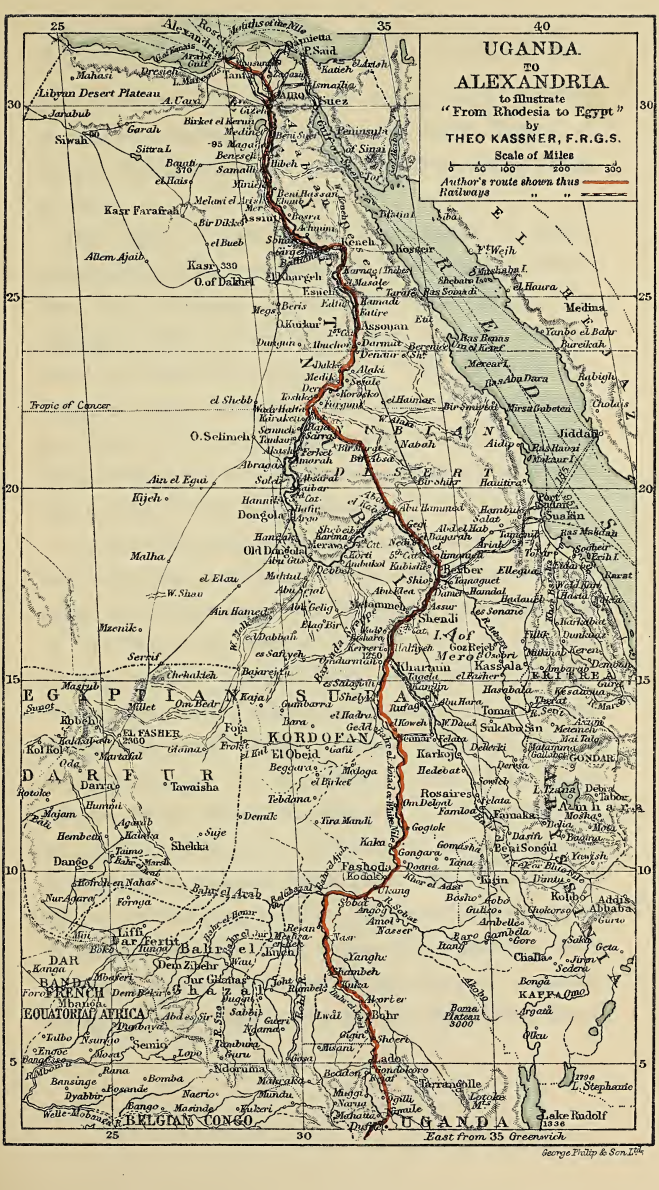
I sent a letter to the Director of the Kilo mines asking permission to visit him, and requesting an answer at a certain village on the road. I set off again and visited a Government experimental farm which seems likely to develop successfully and do much for the benefit of the country, which in this part is eminently suitable for European settlers and offers great possibilities. I was delayed here one day by a swollen river. Here a system of transport obtains which differs from my previous experience. The carriers whom I engaged at Irumu only went one day's march to the next village, and the natives from that village then took the loads to the next kraal. And so in one day if we passed through three or four villages we had to change porters as many times.

At first the scheme worked very well, as far as the

village of Salonyama, up to which place the natives were always ready and had sometimes gone on before I arrived at a village. They took up the loads quickly, and hurried at once to the next village in order to get their work finished. I took the road along the Shari River and across its tributaries from the watershed to the east on the escarpment of Lake Albert, zigzagging in various directions as my geological observations led me. There seem to have been great denudations in this part of the country, where small isolated hillocks stand about, and much alluvial deposit is collected in some parts. In these deposits gold is found in greater or less quantities. The native women here disfigure their upper lips by inserting a round piece of wood about the size of a crown piece, so that the lip stands out straight in front like a ledge.

When I arrived in Salonyama I found a letter from the manager of Kilo inviting me to visit him. I left the next day for the mine, taking a westerly direction. Crossing the stratifications, I could see the structure of the country satisfactorily without visiting special parts.

Unfortunately rain fell heavily. I reached a mining camp on the Shari River, and it was necessary to take shelter for that day. I left my loads here and proceeded to Kilo next day, crossing the Shari, and then hills and ridges consisting of shale


UGANDA.
TO
ALEXANDRIA.
to illustrate
"From Rhodesia to Egypt"
by
THEO KASSNER, F.R.G.S.
Scale of Miles
0 50 100 200 300
Author's route shown thus
Railways
Libyan Desert Plateau
Kasr Farafrah
Siwah
Jarabub
Sitra I.
Allem Ajaib
O. Selimeh
Kijeh
Malha
Macnik
Serrif
Masrub
Rotobo
Majam
Hembeta
Dango
Nur Agara
Dar Bertit
Baur el Jureh
Dem Zubehr
Jur Gindas
Mbaresa
Talbo
Bansinge
Dyabbo
Welle-Mobangi
Tropic of Cancer
Equator
Suez
Cairo
Wadi Natrun
Alexandria
Rosetta Mouths of the Nile
Damietta
P. Said
Lake Timsah
Bitter Lakes
Peninsula of Sinai
Gulf of Suez
Red Sea
Kosseir
Ras Benas
Berenice
Assuan
Wadi Halfa
Abu Hamed
Shendi
Khartoum
Sobat R.
Blue Nile
White Nile
Gazelle R.
Bahr el Arab
Bahr el Jebel
Fashoda
Kodok
Lake No
Sobat R.
Nile
Abyssinia
Medina
Jeddah
Suakin
Massawa
Asmara
Keren
Kassala
Gedaref
Gallabat
Gondar
Lake Tsana
Blue Nile
Adis Abbaba
Harar
Jibuti
Somaliland
Kaffa
Lake Rudolf
Lake Stephanie
Lake Albert
Lake Albert Edward
Lake Victoria
Lake Kioga
Victoria Nile
Semliki R.
Ruwenzori
Mt. Elgon
Mt. Debasien
Mt. Kenia
Mt. Kilimanjaro
Mt. Meru
Mt. Elgon
Mt. Moroto
Mt. Kadam
Mt. Lafit
Mt. Loggo
Mt. Lafon
Mt. Lado
Mt. Otze
Mt. Kinyeti
Mt. Logwek
Mt. Imatong

and quartzite and others of diorite and granite, gradually downwards towards the Ituri River. I arrived after a two hours' march at the mining camp of Kilo.

The place is prettily laid out around a square planted with trees, and with the dwellings and offices like little cottages around it. Mr. Brave, the manager, welcomed me hospitably, but said that he could not show me the mine. This fact did not disappoint me, because I had been able to make geological surveys on the road. I spent Sunday here, leaving the next morning and returning to the Shari camp for my equipment.

In the valley elephants were numerous, but there were only few antelopes. From here I directed my steps north-westward, and, ascending the watershed of the Nile and Congo, I made very satisfactory examinations of the geological strata of the district. Everywhere are prosperous natives, rich in cattle, sheep, and goats. Now I began to experience the disadvantage of the transport system by changing porters from village to village. The farther one leaves the settlements the more the negroes become intractable and almost aggressive. They have killed several of the post couriers to steal their packages. A member of the native police force who the week before I passed was sent to tell boys of a certain village to fetch some loads, was seized, thrown down,

and shot dead with his own gun. These negroes will commit any atrocity to get a gun. When I passed this way it was new moon, on which occasion the natives dance day and night in many of the villages. I had a nasty experience. About three days' march from Shari I arrived at the village of Nioka, where the natives were all in the excitement of a dance. Before I arrived, my carriers had put my loads on the open space in the centre of the village, as usual, and had at once disappeared to join the crowd of dancers. It was impossible to get any carriers to proceed with the loads.

The place where the dances are held is a large open space. In the centre stand the orchestra, with large drums, whistles, and trumpets made out of bamboo reeds. In a circle round them, hundreds of wild, screaming creatures, men, women, and children, sway in graceful step-time to the beating of the drums. Now and then some dancers jump from this ring and spring away wildly one after the other into the fields, where they circle round and round, and finally join the main body again. From all sides of the different villages these strings of dancers approach, each party with a chief at its head.

They paint themselves fantastically all over the body, the designs generally representing wild beasts. The women are naked. Every dancer has a whistle, and wears a head-dress consisting of a grass-woven

THE GREAT DANCE IN THE VILAGE OF NIOKA

NATIVE HUTS ON THE ITURI RIVER

hat with a high bunch of white feathers on the top. As they sway to and fro with the gyrations of the dance these white feathers waving in the air help to make a unique and extraordinary sight. The din is terrific, and it is quite impossible to hear a single word that is spoken. It was obvious that they have no respect for a white man, because when I tried to persuade some of them to act as carriers they made no answer, but impertinently danced in front of me.

After some time a few of the natives were forced by their chief to work for me. Taking the loads hastily, they ran off with them, and after about an hour's march, when they had reached the next village, they dumped them down and raced back to join the dancers. When I arrived all the loads were in one heap, but the village was deserted, every native having gone to join the throng of dancers. I was now in a worse position than at the last crowded kraal. It was midday. I had to wait here the whole afternoon in the hot sun and on till eleven o'clock at night, when the first of them returned. All were drunk. In my annoyance I forced some of them to take my loads to the next village, as it would have been by no means safe to stay here during the night. It was a very difficult and somewhat dangerous task to compel obedience. The natives ran away and hid in the grass and huts, so that a whole hour went before I could get off. Some of these forced carriers were armed

with guns, with which they proudly strutted about. In their drunken state they were positively dangerous, so I adopted the bold course of confiscating their guns, telling them that they would receive them again when my loads arrived at the next village. They then transported my packages without more ado, as they were very anxious not to lose their weapons.

We arrived at the next village about two o'clock in the morning. After a few hours' sleep I prepared to take the road again. In distributing the loads to the carriers I noticed that a great quantity of the provisions were stolen, and I discovered later that even my bottle of corrosive sublimate was missing from my medicine chest. This is, of course, a violent poison, and as the thieves would be sure to take it as medicine without delay, several of them doubtless learned that honesty is the best policy when too late to practise this new-found virtue. The native in general likes taking medicine. After the exhaustion of the dance, and where the strong cold winds on these high elevations cause many colds, developing into pneumonia and other serious disorders, they doubtless welcomed the opportunity to steal this bottle with its blue contents.

The system of changing carriers at every village is bad and occasioned me much trouble. Even around the official station of Mahagi the natives, although numerous, could not be persuaded to enlist as carriers.

They are very dishonest and cunning, and nowhere have I met more clever thieves. They take delight in delaying a traveller, and the officials are powerless. Even the native soldiers steal from the loads and prevent the carriers from transporting the goods. About fifteen miles from the station of Mahagi the junction of the Nile and Lake Albert Nyanza offers an easy crossing. The high escarpment of the uplands drops down step-like to the level of the lake; and after travelling a few days along the northern watershed of the Congo and Nile, where I made minute geological investigations, I crossed the Nile and entered Uganda again.

The country became more sterile, the heat more oppressive, and dry watercourses were frequently passed. The ground was undulating, with a rocky and pebbly surface. Water runs in the Nile and a few tributaries at all seasons.

The natives here were better disposed and more willing than the last lot, although they do not make very good carriers. But they were not cunning thieves. From the lake up to Koba the Acholi natives live, and from the latter place to Uma River the Madi race.

Here the Nile makes great curves as it widens and narrows again, thereby forming many islands overgrown with papyrus. The shores are also overgrown with papyrus, and tall reed grass with swamps stretches

into the banks. Beyond the land rises higher. It is arid, and overgrown with grass and mimosa bushes. This topography continues up to Nimuli. Up to here from Lake Albert Nyanza the waters are navigable by boats, but from Nimule northwards the Nile rapids begin, and continue as far as Gondokoro. They are not high, but extremely broad, and broken by immense boulders of rocks, some of which stand singly and others form long barriers, where the water rushes as if over a weir. On both sides the country is rugged, especially to the west, where mountains border the river.

On the east the country is pebbly and dry, veined by many rivers, both small and large. Many of the large beds are dry and sandy, and water is obtained only by digging holes in the sand.

Nimule lies on the River Unyama—which is navigable for a certain distance—in a hollow surrounded by rising country, and is therefore extremely hot and somewhat unhealthy. Marching along over the pebbly country, ten miles from Nimule we passed the River Assona. It is 100 yards wide, and is shallow with a sandy bed. Here and there to the east small kopjes stand up. The heat increased daily, and it was necessary to travel during the early morning hours, from three o'clock in the morning till about ten o'clock, when the sun's rays became too hot.

The River Uma and several other small watercourses

SUMMER FASHIONS OF THE ITURI NATIVES

THE BARI IN WAR-PAINT

were passed, but they were dry. The country became more barren and desolate as we advanced. The natives, who belong to the Bari tribe, do not follow tillage much, but possess a fair number of goats and sheep and, in some places, cattle. They are a poor lot, and syphilis is rife.

About three days before reaching Gondokoro the tsetse fly appeared in great numbers. Natives who had formerly owned many cattle told me that all their stock died, leaving them poor. They were not aware that the tsetse fly was responsible for this. We saw many antelopes near the water.

Always marching in a more or less northerly direction parallel with the Nile, through country always ascending gradually and broken by solitary kopjes to the east, I arrived on Christmas Eve at Gondokoro, where once a month a boat leaves for Khartoum. Here also I came to the first cable connection since leaving Toro.

I made final preparations to leave for Europe by the boat, for which I had to wait a week.

XVII

HOME AGAIN

GONDOKORO is the last official station of Uganda. It was formerly a trading station, and many travellers mention it as a post of importance. The old buildings have disappeared, and the place is now laid out in one main street, which contains the post and telegraph offices, as well as the Government office and dwellings. At the head of the street there are trading stores kept by Indians, Arabs, and Egyptians. The heat was oppressive, but a slight breeze afforded a little welcome relief.

Here I got rid of my tent, guns, and other unnecessary equipment, as my work was now nearly completed.

The Nile is about 800 feet wide at this point, and is broken into two arms by an island opposite the station. There are many crocodiles and hippopotami. Papyrus does not grow here, the barren land reaching right to the banks of the river. The shallow water is about ten feet lower than the banks, indicating that formerly it was higher and the body of water

THE NILE NEAR LADO

A NILE SCENE NEAR LADO

THE ANGLO-SUDANESE GUNBOAT "SULTAN"

Which does service on the Nile between Redjaf and Khartoum

greater. On account of the shallowness the boats are flat-bottomed.

On the 30th December, 1908, I left Gondokoro. The first place of call was Lado, in the Enclave territory of the Congo. As the Nile takes many sharp bends, it is very difficult for the boats to travel without constant interruptions, and they often run on the sand-bank or against the opposing corner of a turn. The current is strong, and the boat was often thrown upon the bank with a sharp jerk. As the deck of the boat is high, it is apt to be top-heavy, and another boat is chained to its side so as to keep it upright. When running at full speed carelessly round one of the bends, the boat with the cattle and soldiers tilted with such force against the shore that a hole was knocked into it, and the water entered so fast that it soon began to sink slowly. The soldiers were at once transferred to the other boat, the damage was examined, and a temporary repair effected. A sheet of galvanized iron was nailed over the hole, and then the boat was able to proceed with a lighter load than formerly.

A native soldier stood on the rail of both boats with spread legs, and as they moved farther apart he fell into the water and disappeared. All his companions looked down calmly, but made no effort to save him. An officer in a small boat searched for a little while around the water, but there was no trace

of the missing man. He had probably found a living tomb in a crocodile.

After a delay of some hours we moved on again with the damaged boat, but only twenty minutes elapsed before another misfortune overtook us. This time, on nearing the bank at another curve, it was found that the boat could not be moved. On examination it was seen that the powerful steering-rods were bent right under the steamer. Blame was laid upon a hippopotamus, but in my opinion the accident was caused by careless driving. A day and a half was lost in straightening the great iron rods. The mosquitoes and the terrible heat, and the odour from the natives and the animals imprisoned in such small space, made the hours unbearable for me after the freedom of my life and movements during my recent journey.

The exorbitant fare of £20 is charged for this unnecessarily long journey of eleven days, and the price includes no food or drink, which costs almost as much again. If I had known in advance of the discomfort of this part of the journey I would have kept my tent and marched along the banks through the different villages of the Dinka tribe. Although the natives are not friendly, my trip would have been less unpleasant.

Proceeding into the Bahr-el-Ghazal, our river course led through extensive fields of papyrus, with nothing

THE FLOODED NILE

Photos by permission of the "African World"

THE BEACH, OMDURMAN

A SCENE IN OMDURMAN

Photos by permission of the "African World"

THE MARKET, OMDURMAN

else visible on either side except occasional pools of water. The country must at one time have been under a great lake. The "sud," which closes up some of the channels, is often known to stop the boat.

The heat was unbearable—the worst throughout my whole journey. Mosquitoes swarmed, and generally the last stage on my way back to civilisation was most disappointing and disagreeable.

On Sunday, the 10th of January, 1909, we neared Khartoum, and the country changed to a desert. Here and there sandy plains scattered with scraggy bushes and a few cultivated patches of native lands on the sloping banks contrasted with the surrounding barrenness.

Nearer Khartoum the desert is even more pronounced. Omdurman, with its large, square, clay-built native houses, stretches far along the left bank, and to the right lies the new town of Khartoum, with its hotels, fine buildings, railway-station, and all the modern features of a rising city. From here European dress and habits prevail.

It was the depth of the northern winter, and the change from hot to cold was abrupt. A biting cold wind blowing clouds of sand met me as I entered the city. From Khartoum I travelled by train over the desert to Wadi Halfa, a journey of about twenty-four hours. Another twenty-four hours in a fine Nile boat took me to Dhebel, from where a train journey via

Luxor landed me in Cairo. I had come into the haunts of the holiday tourists.

I returned to Europe by Alexandria, and was glad to arrive once more in the bosom of my family, after the most interesting and exciting months of my life.

XVIII

THE CONGO FREE STATE

THE history of the Congo Free State began in 1876, when Leopold II of Belgium formed the "Comité d'Études du Haut Kongo," and three years later that committee deputed H. M. Stanley to visit the Congo region to establish trading stations. The first station founded was Vivi, and it was followed by Isangila, Manyanga, Leopoldville, Equatorville, and Stanley Falls. In 1884 the committee surrendered its functions to the Association Africaine Internationale, which in the following year founded the Congo Free State under authority conferred by the Congress of Berlin. Under the constitution set up, King Leopold was made sovereign of the new state and Brussels was appointed to be the seat of government. In the year 1889 Leopold bequeathed his sovereign rights in the Congo Free State to Belgium, and in the following year Congo Free State territory was declared inalienable and Belgium was given the right to annex it after ten years. This right of annexation was in 1901 continued, but it expired in 1903, when the Belgian Government abandoned their option of

acquiring the country, the alleged reasons being popular opposition. But in 1908 the treaty of cession was adopted by the Belgian Parliament, and proprietary rights in the Congo State were thereby transferred from King Leopold to the Belgian State.

The resolutions of the Congress of Berlin, by which the Congo Free State was created as a political entity, declared the country to be perpetually neutral, stipulated for the freedom of trade in the basin of the Congo, and freedom of navigation of the Congo, its tributaries, and the lakes and canals connected with it. They also laid down specific regulations for the protection of the natives and the suppression of the slave trade, and provided that in the event of dispute regarding the territories of the conventional basin of the Congo the signatory powers should accept arbitration by one or more friendly governments.

Even the most ardent defenders of Belgian administration in the Congo Free State cannot profess that the resolutions of the Congress of Berlin were kept as regards free trade. The plea of exigency may be put forward for the manner in which the territory was exploited for private gain, and a plausible case could be established under this defence. Hostile critics would substitute the word "greed" for "exigency," and would allow the validity of no reason that excused any breach of the conditions under which

administration was to be conducted by the aforementioned resolutions. But I have no intention of adjudicating upon the merits of the case. Elsewhere I have outlined the provisions of the present conditions and regulations of Congo administration. If these regulations are carried out—and every present indication is that they will be—then no country will have any just cause of complaint against the Congo administration. In the narrative of my journey, which constitutes the principal part of this book, I have given my opinions regarding the so-called atrocities in the Congo, and in doing so I perhaps discussed a subject that would have had a more fitting place here. I shall not labour the subject again, but will content myself with repeating what I believe to be the truth, that atrocity and mutilation, or even cruelty, is not and never has been a feature in the official administrative policy of the Congo Free State. It may be well to recall that King Leopold wished, in the early days of his African sovereignty, to entrust General Gordon with almost vice-regal powers in the Congo State, but that the path of duty for General Gordon then seemed to lie a few thousand miles farther east. If Leopold's motives had not been pure and his ambitions with regard to the Congo noble, he would not have sought the services of such an administrator. That individual servants of King Leopold, civil or military, may have been guilty of cruelties I do not

attempt to deny or excuse. But these were isolated acts of men elevated to authority which they abused, and were in no sense a feature of administrative policy any more than the recent delinquencies of the West Ham Guardians were the acts of the British Local Government Board.

The total area of the Congo Free State is estimated to be about 900,000 square miles, so that it has almost eight times the area of the United Kingdom. It is divided into fourteen administrative districts, which are Banana, Boma, Matadi, the Cataracts, Stanley Pool, Kwango Oriental, Lake Leopold II, Bangala, Equator, Ubangi, Welle, Aruwimi, Lualaba-Kasai, and the Province Orientale. The Governor-General resides at Boma or M'Boma, formerly known as Embomma or Lombi, which is on the right bank of the Congo River about forty-five miles from its mouth. It is the administrative capital of the country. Then each of the districts is in the charge of a commissioner. There are in all about 600 posts and stations throughout the territory, and at these are some 1600 white Government officials. Thus the average distribution of posts and stations is one for every 1500 square miles of land and one white official for every 560 square miles.

The population of the Congo Free State is supposed to be about 30,000,000 altogether, and the Europeans number less than 3000, rather more than half of

them being Belgian. The officers and some of the non-commissioned officers are Belgians, the total of these being a little over 300. We have therefore on the average about one white military officer to every 100,000 natives. This small proportion is sufficient to condemn the charges of cruelty and mutilation made against the Belgian officials as inaccurate and quite impossible. There are almost 500 missionaries in the territory, rather more than half of them being Catholic and rather less than half Protestant. The mission stations number about 120. The Government co-operates with the missionaries in matters of education, and there are three agricultural colonies where children are received and instructed.

The army of the Congo consists of about 15,000 native soldiers under about 150 Belgian officers. Some of the non-commissioned officers—about 200—are also Belgian. The native soldiers are raised by conscription, the length of service being seven years—five in the ranks and two in the reserve. Before being drafted into their regiments recruits are trained in instruction camps. They are raised in all parts of the state, and are generally sent to districts far from their homes—a military policy whose wisdom has received the acceptance of every nation in history when the supreme authority was alien. The ranks are equipped with the old Albeni rifle, the oldest weapon of the Belgian army. The

men are bare-footed, as is the native custom, and are thus more natural and free in their movements than they would be if handicapped by leather footwear. All soldiers are married men and live in small, neat cottages, copied from European models and kept clean and orderly.

A time-expired soldier of good conduct is often appointed caretaker of a rest-house, which I shall describe later, or he may be sent to a village where his experience in discipline and order causes him to be regarded as a petty chief—a sort of unofficial justice of the peace. It is often possible to recognise an old soldier in a native village. His bearing, his respect for the white man, the recognition of governmental authority, his system and orderliness single him out from his fellows. The disciplinary effect of these old soldiers when they re-enter civil life is great, and one of the potent influences towards the settlement and civilisation of the country.

The native is made to pay a poll-tax of about one franc per month. In lieu of this tax he may work for four days per month and receive payment of 25 centimes per day, or its equivalent in calico or beads.

The Government has established an excellent system of river transport on the Congo and some of its tributaries. The channel of the Congo is navigable from its mouth to Matadi, about 100 miles

THE "SEGETINI"

A 500-ton stern-wheeler of the Upper Congo-Great Lakes Railway at Basoko on the Upper Congo

ON THE UPPER CONGO

Great Lakes Railway

up. Upon this waterway about a dozen State-owned steamers ply. Above Matadi for a distance of more than 200 miles the rapids are numerous and navigation is impossible. At the top of the stretch of rapids is Stanley Pool, with the station of Leopoldville, above which are 1200 miles of navigable river as far as Stanley Falls. Upon this long stretch of the Upper Congo thirty-six Government steamers ply. Communication between the lower river and the upper river is secured by a railway of about 250 miles in length which runs from Matadi to Stanley Pool, preserving an average distance of about twenty miles to the south of the cataract-broken river. A Belgian company is at present constructing a great interior railway which will run from Stanleyville and Nyangwe to Tanganyika and Lake Albert Nyanza. The total length of it will be about 900 miles, and sections of it are being opened to traffic as it proceeds. The rates of transit and of transport with other conditions are reasonable in price and terms. The passenger rates on the river steamers are four times as high for a white man as they are for a black man. Of course the accommodation provided is vastly different in the two cases. A white traveller may have a cabin by paying 4s. (5 francs) per day above the price of his journey ticket, and he may be fed for a few coppers less than 10s. per day. The food is good and well cooked, the menu varied and

the service dainty. There is no comparison between the catering at the railway-stations in many parts of British South Africa and that on the Congo River steamers. Philanthropic and religious associations are charged only half the rates paid by ordinary passengers and for ordinary merchandise, a concession that prevails in no other part of the world with which I am acquainted. On the railways the fares for second-class passengers are only one-eighth those of first-class passengers, and black travellers of the minimum number of thirty in the service of one employer get a reduction of 50 per cent from the second-class fare.

In the interior there are many so-called "rest-houses" along the main roads. These rest-houses are an admirable institution, and are well worthy of being copied by the authorities in other lands. They are at the disposal of the traveller who journeys through the country, and many a time I have blessed the man who first thought of them.

They generally consist of a roof, broad and heavily thatched, supported on four or six stout poles. They are large enough to permit the erection of a tent under the roof. A tent does not afford adequate protection from the scorching sun, but the shelter provides the necessary protection both against the heat and against the heavy rain-storms that are so frequent.

The natives build these houses under instructions from the Congo Government, and also keep them clean and in good repair. In districts where wild animals abound the shelters are surrounded at a little distance by a fence of poles and bamboo reeds. In nearly all the villages upon the line of the main roads the chiefs build more pretentious and more comfortable buildings, primarily for the accommodation of the white traveller, and they vie with each other as to whose rest-house will be the best. Some of the most ambitious of these public buildings are quite extensive establishments, consisting of clay houses erected on a nice square and divided into several rooms, while adjoining the main building are several smaller buildings, consisting of kitchen, mess-room, and "boys'" room. Across the square are thatched shelters without walls, such as I have already described, for the use of the carriers. In some such stations where caravans pass frequently a tariff is hung up in the principal building, so that any traveller may know the price that he ought to pay for provisions—goats, sheep, fowls, milk, meal, sweet potatoes, and other comestibles procurable in the locality. The prices given are always fair. The tariff is of advantage both to the traveller and to the natives; the former is spared the objectionable haggling and pays no more than he ought to do, while the latter receives as much as he ought to do. On the whole I cannot

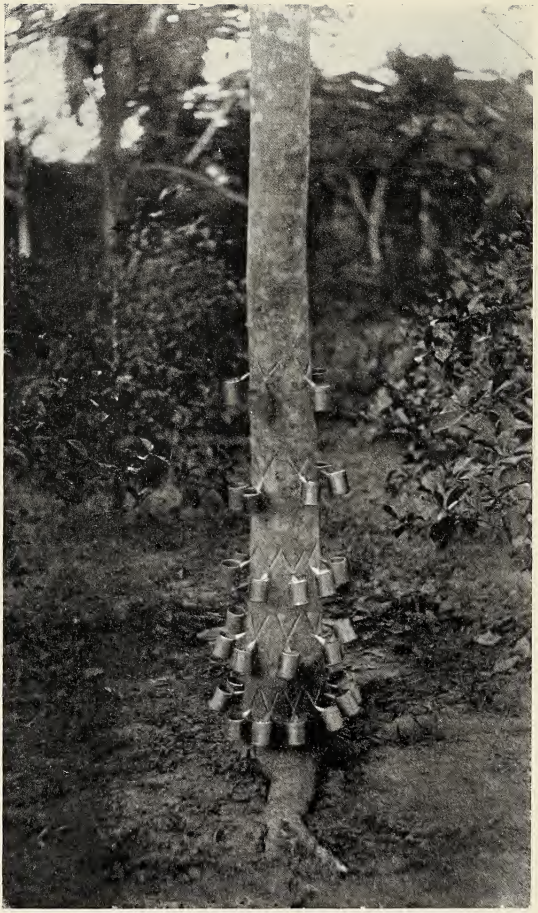
speak in too high praise of the utility of the Congo rest-houses, whose establishment reflects the highest credit upon the administration that called them into being.

The territory of the Congo Free State embraces almost the entire network of the Congo and its tributaries. In the centre of this area there is a great depression, the so-called Congo Basin, which is nearly all overgrown with dense forest—the Great Tropical Forest. In some places this forest is very dense and impenetrable. It contains a luxuriant growth of rubber-yielding climbers and trees, which cover enormous tracts, and are capable of yielding an almost untold wealth of gum of good quality.

Vast as are the rubber resources, they must be used and not abused if they are to be permanently valuable. Large trees of great age may be tapped frequently and not suffer, but the younger growth cannot yield a lasting harvest if bled too much or too frequently. Natives collect the rubber and are apt to show a lack of consideration for the well-being of the trees whose juice they draw off. They are apt to tap the trees too frequently or even to cut them down altogether, especially far from Government stations and where governmental supervision is loose by reason of distance from such a station.

The Government exercises great care in the matter of rubber collection. Besides giving the subject care-

COLLECTING RUBBER LATEX IN THE LUSAMBO FOREST



COQUILHAUTVILLE, BELGIAN CONGO

Extraction of Latex Henea

ful study to ensure that the methods employed do not impair the vitality and future life of the trees, it also disseminates the result of the studies to its agents throughout the territory. To cut down the tree yields the greatest amount of rubber at the moment, but it gives one harvest only, and the tree has no longer any rubber-yielding value. If the tree is cut down close to the soil its life of usefulness is finished. If the trunk is cut down at some distance up, any new growth upon the trunk seldom does well, because generally the trees are thickly set, and air and light cannot penetrate freely through the higher surrounding trees. In spite of this, however, one species of rubber tree, the Landolphia, if cut at a distance of not less than a foot from the ground, seems to grow satisfactorily again, if it is not choked by too thick a growth of other trees, shrubs, and brushwood. Generally speaking, however, to cut down the tree to get the rubber, though advantageous at the moment, is disastrous for the permanent rubber-yielding value.

Transverse incisions of the tree bark may provide openings or wounds from which the latex or juice can flow into cups, shells, or receptacles provided to receive them, and the incisions may be vertical. The transverse incisions are, however, fraught with danger to the life and productiveness of the tree, and the longitudinal incisions are strongly recommended by the government experts. The "herring-bone" or oblique

incisions, which are the most approved method of rubber collection in other rubber forests of the world, are little practised in the Congo district.

The incisions to allow the juice or latex to escape from the rubber tree should be made with a very sharp knife. The latex that flows from the wound is a thin fluid, and must be coagulated so as to reduce it to a marketable form. It coagulates if allowed to stand, but the process is generally hastened by the addition of a little lime juice or other plant juices, or by heating. Sometimes the native may anoint his body with the juice, which coagulates from the natural warmth of his body. He then peels off this false skin and takes it to the trader.

African rubber comes to the market in many forms, which depend upon the method of collecting and coagulation.

Over 80 per cent of the value of exports from the Congo Free State consist of rubber, and this fact will indicate the importance of the rubber forests and of care to preserve them from undue bleeding and destruction. The quantity of raw rubber exported from the Congo is in excess of 6000 tons annually, but this quantity is only one-twelfth of the world's supply. The value of Congo rubber approaches £3,000,000 sterling every year.

After rubber, the next important product of the country is ivory. In the uplands of the Congo Valley

BELGIAN CONGO

Tusks at Libenge, on the Ubangi

BELGIAN CONGO

Tusks of 49 and 51 kilogrammes

THE HARBOUR AT LEOPOLDVILLE

Terminus of the railway from Matadi and head of the steamer navigation on the Upper Congo

and on the borders of the great forest are many thousand head of elephants. The value exported annually is about £200,000, and although the quantity remains about uniform the value shrinks, due to the lower price of elephant ivory through the competition of ivory substitutes, such as xylonite. A wise provision makes illegal any trading in female ivory. There are supplies of female ivory sufficient to make many men millionaires lying in the Congo State to-day, but they may not be sold, bought, or exported. To abolish the regulation would tend seriously to diminish the herds of elephants and gradually to exterminate them.

The other chief products of the state are palm nuts, palm oil, and white copal. Coffee and cocoa are cultivated, and tobacco is an important commodity of increasing value. Government has set out some plantations of Havana and Sumatra tobacco and some tobacco is now exported. Almost every village has some tobacco trees in its immediate vicinity.

The lands within the confines of the Congo State are divided into three classes : (1) native lands, where natives have the right of occupation ; (2) registered lands, which are the private estates of others than natives ; and (3) crown lands, which embrace all vacant land. Private estates must be registered according to specific regulations, which are enforced by the Conservateur des Titres Fonciers.

The impression of the Congo territory as being a vast white man's grave, which is less general than formerly, but is still not dispelled, is founded entirely on misapprehension. It is possible to stand right on the Equator and still in a temperate climate. Altitude is as effective as latitude in modifying climatic conditions, and the interior Congo consists mostly of a series of plateaux with a temperate climate, eminently suitable for the habitation and activities of the white man. The vegetation ranges from the cocoa and rubber of the tropics to the cereals of Northern Europe. In many respects the climate is better than that of Northern Europe, in that weather may be known in advance almost to a certainty. By following the crops suitable for the climate, the practice of husbandry may be reduced almost to an exact science, and is not apt to be disturbed by vagaries of weather that may bring to naught the best-laid schemes of agriculturists in Europe. The soil is virgin for the most part and generous in its yield. There is not the great dearth of fluvial waters that mitigate so greatly against the farmer in South Africa, and the droughts of Australia are unknown.

I can foresee a thriving farming population settled in the high Congo drawn from the congested cities and countries of Eastern Europe. Belgium especially, where almost every square yard of soil is subject to an intensive system of agriculture, needs a place to which

her surplus population may migrate, and the Congo State offers such a place. But the country should be settled, not by the individual efforts of a few pioneers, who would have many hardships before they could establish successful farms, but by well-directed schemes of immigration, whereby small communities were established under Government assistance, with expert official guidance as to the crops to be grown and of Government aid in carrying the produce to the markets of Europe. The profits accruing from the rubber industry might well be employed in some scheme such as that I suggest. This would carry the development of the country forward many paces and would lay the foundation of a great white nation in Equatorial Africa. The fault of those who go to the Congo, as to other new countries, is that too many of them are seeking speculative means of acquiring wealth—rubber, gold, ivory—and in the search for what may prove a shadow they neglect the substance that lies in their path. The get-rich-quicks never lay the keel of a solid state. Their work has often to be torn up by those who follow that a substantial structure may be reared on a solid basis.

I have said nothing yet about the mineral wealth of the Congo State. The chief mineral deposits of value seem to be in the Katanga district, the part that bellies into the northern portion of Rhodesia by which

I entered the Congo. There has been much exploring and prospecting in Katanga, but this unusual mineral wealth is far from having been laid bare to its full value. The most important deposits of metallic minerals are the bodies of copper, which are of extraordinary richness and unequalled in the world. The copper zone runs in a line east to west and has a length of 200 miles. The veins are irregular and form pockets which often contain pure metallic copper. Down to about forty feet, which is the oxidised strata, the richest ore is found. Deeper it becomes poor, yet sufficiently rich to be worked with fair profit. The great extent of surface discoveries shows such enormous quantities of rich ore in sight that the actual testing of the lower seams has not yet been thought of. The value of the veins runs from 6 to 25 per cent, with an average of 14 per cent.

This is much above the percentage of other profitable mines. The average value of the Rio Tinto Mine is 3 per cent; of Calumet and Heckla, 2 to 3 per cent; and the Mansfield, $1\frac{1}{2}$ to 3 per cent.

There have been various estimates made of the quantity of ore in the developed mines, and they show 2,000,000 tons, which represent a value of 3,000,000 francs. There are later estimates which give 9,000,000 tons of ore at Kambove, of which 3,000,000 tons contain 12 per cent of the metal. In the Étoile du Congo group there are estimated to be

320,000 tons of ore at 15 per cent and 900,000 tons at 6½ per cent. These properties are only a small portion of the extensive copper belt, and 185 other copper-ore bodies have been developed.

These figures give some indication of the vast mineral wealth of the Katanga copper region, and invite one to speculate upon the future of the country and upon the prospects of the working companies. There is also a tin belt which runs south-south-west to north-north-east at a distance of about 100 miles from Taigumbe to the junction of the Lualaba and the Lufube rivers. The reefs have a thickness of from 18 to 48 inches. In 1905 5496 kilos of ore were extracted, and in 1906 14,000 kilos; but the spread of sleeping-sickness stopped work, which has not been resumed.

Gold has also been discovered east of the Lualaba River, in Ruwe, and small amounts have been extracted experimentally. The occurrences favour the possibilities of a prosperous gold industry. There is a great belt of iron ore near the southern border of Katanga, and it may become a profitable source of the metal at some distant time. The mineral wealth in Katanga and the Congo is by no means as far away as is generally imagined. It is possible to reach these places one month after leaving Europe, the time being very little more than necessary to reach the South African goldfields.

When the connections from the west coast to the northern interior are more developed the time will be shortened very much, and the road will no longer lie by the Cape and north again.

The Katanga is generally healthy for Europeans and has an altitude of 4500 feet.

The district of Katanga is being exploited by the Katanga Company, working with the State. The history and constitution of the Katanga Company are worth a few words of description. Its formation was the outcome of the responsibilities assumed by the Congo Government at the Berlin Conference of 1885. This Government was required to show occupation of the country within a stipulated time, but financial conditions made it impossible that they could fulfil the condition unaided. The time allowance was drawing to an end and no progress had been made, while some expeditions from the south threatened to enter and occupy the country the moment the treaty time had passed. At this juncture the Compagnie de Congo pour le Commerce et l'Industrie offered its assistance, which was welcomed by King Leopold. This assistance saved the situation and the Katanga territory for the Government of the Congo. On March 12th, 1891, certain foundation terms were agreed upon for the formation of a new company—the Compagnie de Katanga. The boundaries of the area under the new company were as follows: on

NATIVES OF THE BELGIAN CONGO

With loads of ivory and rubber

A BELGIAN STEAMER

On the Upper Congo at Benentaba, south of Ponthierville

the north, a latitudinal line midway between 2° and 3° south; on the east and south, the Congo State border; and on the west, longitude 23° 54′. The objects of the company were to explore for minerals, to assist immigration, to cultivate the land, to trade, and to establish transport facilities on land and water. They undertook that within two years they would launch two steamboats on the Upper Congo River or on the Great Lakes of the border; that they would establish three garrison stations within their area; that they would establish and maintain a proper police service, and suppress the trade in slaves, spirits, and guns. In return they were granted ownership of one third of the area placed under their administration, the State retaining the other two-thirds. The method of land-partition was that the entire area should be divided into squares like a chess-board, each square being six miles each way, and that two squares should pertain to the Government, one to the company, and so on, repeating the cycle. This method of partition was found impracticable, and the conditions were modified later on, in 1900.

The Compagnie de Katanga was floated on April 15, 1891, with a capital of 3,000,000 francs, in shares of 500 francs each. Then immediately three expeditions were sent out to the country, one under Delcommune, the second under Bia and Francqui, and the third under Stairs. Stations were established, the

authority of the Congo Government introduced, and the treaty conditions complied with.

In May, 1896, the company and the State came to another arrangement whereby the southern boundary of the administered territory was changed to 5 degrees south, thereby reducing the area of the company's land ; but they received a grant of 4,000,000 hectares on both sides of the Lower Lomani River. This new territory was independent of the Katanga area, and a subsidiary company—the Compagnie du Lomani —was formed in July, 1898, to work it. The capital was 3,000,000 francs. Minerals were excluded from the rights granted to the Lomani Company, who had surface rights only, but who have earned good dividends from the exportation of rubber, ivory, and copal. They were granted the option of purchasing the land within ten years at the price of five francs per hectare. This option has now been exercised to some extent.

The Katanga district of the Congo is supposed to have an area of about 200,000 square miles, so that it is about four times as large as England. To govern this area an independent committee of six members was formed, two members being representatives of the company and four representing the Government. All expenses and profits were met or received one third by the company and two-thirds by the Congo State. The sum of 1,000,000 francs was set aside

for working expenses, but this had to be considerably increased as the responsibilities widened. This is the Comité Special du Katanga of to-day. The arrangement is for ninety-nine years, and if not renewed the territory reverts to the original agreement of 1891.

In December, 1900, the second subsidiary company was formed. The Tanganyika Concession Company, at that time busy exploiting in Northern Rhodesia, obtained the right to explore the minerals of the Katanga under certain conditions until the end of 1909 or 1911.

The Tanganyika Company was floated in 1899 with a capital of £100,000, which was gradually increased to £1,000,000 sterling, in £1 shares.

The profit for the flotation of the mines discovered are divided into one third to the Tanganyika and two-thirds to the Katanga, the latter having the control.

On the 28th October, 1906, the third subsidiary company of the Katanga was formed, i.e. the Union Minière du Haut Katanga. The capital is 10,000,000 francs in 100-franc shares. The profits are divided into one third share to the Tanganyika Concession and two-thirds to the Comité Special du Katanga. The company, whose rights expire in 1990, is to exploit the mines discovered by the Tanganyika Concession Company. Companies must be formed to work the properties.

XIX

THE DEVELOPMENT OF AFRICA

AMONG the world's continents Africa, judged by its contributions to external commerce, is the least important. Many reasons explain this fact—some of them topographical, some ethnological, and some sociological. The north of the continent is a narrow strip of fertile coast land backed by a desert whose only contribution to the northern strip is hot winds and sand. The only large river of North Africa is the Nile, and only the Nile makes Egypt possible. Down the west coast and the east coast the country is either unproductive or of a nature that has not invited white settlement; and in the temperate south, which has a climate more suitable than any other part for European settlement, natural disadvantages of barren soil and lack of water have held back development while other and more promising regions in other continents awaited settlement. The division of the country into petty kingdoms under black and savage rulers, the practice of slavery, the scarcity of rivers to afford avenues of transport, the paucity of sheltered bays and estuaries to give harbour to ships

—these are other factors that have contributed to the tardy development of a large continent of great wealth, both actual and potential.

A great contributing cause of the natural unproductiveness of Africa lies in the want of rain. The formation of the land is mostly a high internal region terraced in plateaux, and the winds that reach the mountain plateaux have mostly spent their moisture against the mountain ridges on their way from the coasts. There are individual districts where the rainfall is generous enough to make agriculture possible and profitable—some parts of Equatorial Africa, some of the Mediterranean coast at the foot of the Atlas Mountains, and smaller tracts in the east and southeast. Extensive regions are parched desert, and only in the north of Egypt is there a high density of population.

For all these reasons Africa has not tempted either the settler or the conqueror as other lands have done. The turn of Africa has now, however, arrived. She is getting a share of immigration as she has not done before, and capital is being invested in the development of her natural resources. War has been abolished within her borders. Only in Morocco and perhaps Abyssinia are there possibilities of trouble, but even in these places a war would be brief and decisive, and would be a prelude to lasting peace. Egypt is quiet under the slow but certain progress of an advancing

civilisation, and any disturbance there will be political, not military. War between different native races can scarcely be more than tribal conflicts, and can retard the progress of industrial development not at all. War between the native races and their white guardians cannot be—all the Mad Mullahs and Hereros, though they may show a spirit of unrest, cannot loosen the grip which Europe has taken of their land.

The present partition of Africa, almost every square inch of which is now governed by a European Power, has arisen from the colonising ambitions or the spirit of empire that is so pronounced a feature of modern national life. Colonial aspirations are natural and legitimate. They have their foundation in two requirements of modern nations—the desire for trade, and the need for places of settlement for surplus population. Britain, the greatest land-grabber on the whole stage of world history; Germany, whose desires are as acute, but who arrived too late among the company of Great Powers to gratify her desires much; France, whose needs are less but whose ambitions are not less proud; Portugal, who has yet to learn the elements of successful colonial policy; and Belgium, whose colonial possessions have been found for her by a clever monarch—these nations have partitioned Africa between them. The result is good for Africa, and will be better with the passing of every year.

The Development of Africa

Having sketched, briefly and imperfectly, the main causes of the slow march of African settlement, I shall proceed to something more particular, the development of South and Central Africa. Egypt I shall leave alone ; its destiny is carved for it and its colour is the British red—virtually if not actually, and it will be so actually some time far or near. Algiers is the garden colony of France and proceeds under favourable stars in its agricultural development ; Morocco is in the French sphere, but its future lies in its minerals rather than in husbandry. But the great group of colonies known as British South Africa has a future of its own, which will be worked out by the colonists themselves and not by the fostering attention of any home government. The Belgian Congo, on the other hand, is yet far from the stage when it will be able to stand alone. In British South Africa are about a million and half of white inhabitants ; in the Congo Free State there are about three thousand. The Belgian Congo has the smaller area, but per square mile it has far greater wealth and is capable of supporting about as large a population as the whole of British South Africa. If the Congo State were as densely populated as Belgium it would have as many inhabitants as Europe and Africa combined. Of course such a condition is impossible, but the calculation illustrates the congested condition of Belgium and the extent of her African colony. I have visited

and travelled extensively in every colony south of the Equator in Africa and in a good many north of it, and I say unhesitatingly that the Congo Free State is king of all other African countries or colonies. When the Congo takes the place that is its proper due by reason of its great mineral wealth and its agricultural possibilities it will stand supreme. Its mineral wealth is great, as I show in another chapter. It is not yet known that it contains the valuable gold and diamond deposits of British South Africa, but it can afford to dispense with these. Such sources of wealth are passing. Goldfields become worked out and leave only large heaps of tailing dumps as a memento of the activities that once surrounded them; but the permanent well-being of a state never came to it by its gold.

The wealth of the Congo State has a firmer foundation than a gold-mining industry. Its copper and tin deposits, though yet barely tapped and almost unknown, show ore masses that will feed gigantic metallurgical industries for hundreds of years. In the field of agriculture her possibilities are vast, and though not yet accurately gauged, are indicated by the variety of her products, the fertility of her soil, her different altitudes making possible the cultivation of crops of all zones, her climate that supplies her plains and plateaux with a regularity of rainfall that is lacking farther south. Her forests contain an

amount of valuable timber that will feed European mills when other sources have become thinned or exhausted, and her great river system, the like of which is unknown anywhere else on the continent, provides a natural channel by which all her products can be carried to the coast with the maximum of convenience and the minimum of expense.

The ivory at present in the Congo State is enormous in quantity. Of course, that source of wealth will not be permanent. The elephant will disappear as civilisation advances. State laws may retard its destruction, but cannot prevent it except by holding back the future of the country. Ivory will be a prominent export for many decades to come, but the settlement of the country will eventually pronounce the doom of extinction upon the sources of ivory.

The rubber wealth of the Congo is enormous. At present it is so vast that the subject of rubber plantations has hardly been thought of. Native wild rubber from virgin trees supplies the export trade, and there are vast areas whose rubber trees are untapped. The diminution of the rubber supply is not yet awhile. But when the question of rubber plantations becomes a practical problem for the Congo State it can be taken in hand better than in any rubber district in the world. In no other rubber-producing country in the world are conditions so favourable to white men. The Amazon and the Malacca States are the other chief

sources, but the Congo State is far healthier than either of these districts.

There are two great enemies of men and stock in tropical and sub-tropical Africa, and the Congo is included in the area. These are the tsetse fly and sleeping-sickness. But time and science will certainly cure these evils, great as they are at present. The tsetse fly has been banished from many districts where formerly its sway was not disputed, and the settlement of the country will achieve the same result in districts at present infested. As for the sleeping-sickness, the position is only one of hope. Cases among white people are extremely rare, which is one circumstance for which we ought to be thankful. The rapidity with which the disease has spread and its terrible effects, wiping out the black population of entire districts in its march, have occasioned the suggestion that this may be the awful weapon which is destined to settle the race question in a manner too horrible to contemplate. Man aided by science is doing his best to blunt and break the death scythe that is cutting wide swaths among the native races. That is the most that can be said at present.

When we survey the development that the continent of Africa has reached within the last generation, can we question the assertion that by the end of another generation the agencies of civilisation will have penetrated to all parts? The railway will have run its

tracks into a great connecting network of lines, and communication across the continent by several routes will be rapid and easy. Then civilisation must begin to apply itself to intensive work ; the extensive will have been achieved.

The avenues by which external commerce will find its exist and entry into Africa are fixed as far as the south is concerned, but some modifications will take place. Cape Town is the chief commercial centre of the extreme south. She cannot hope to maintain that position. She is practically at the extreme end of a peninsula. She may always be the port for the south-western part of the Cape Province, and her commerce may be maintained at its present level as her immediate hinterland develops, but her far inland trade is bound to desert her in time. Port Nolloth, Walfisch Bay, and other ports will arise to form the ocean gateways of the northern part of the Province. Then Namaqualand, Bechuanaland, and Rhodesia will be placed nearer to Europe and the commercial sphere of Cape Town will be more circumscribed. Even now Beira is a much nearer port to Rhodesia, and the Cape colonial ports maintain their hold upon Rhodesian trade only by the arbitrary railway policy that keeps the Beira railway rates high, so as not to rob the Kimberley-Bulawayo line of its Rhodesian traffic when a thousand miles of haulage is saved by

the Beira-Salisbury route. Port Elizabeth and East London will always remain the ports of Central and the Eastern Cape Province and of the southern part of Orange Free State, but the sphere of Durban will become less than it is. She is nearer to the northern half of the Cape Province, but she must loosen her hold upon the Transvaal because Delagoa Bay has the strategic position.

The two Portuguese ports, Delagoa Bay or Lourenço Marquez and Beira, are destined to increase at a more rapid rate as the Transvaal and Rhodesia are carried forward on the wave of industrial development. This is the natural economic tendency, the fulfilment of which may be retarded by artificial political conditions, but cannot be permanently prevented. Many of the ports of East Africa will depend upon their immediate hinterland, but Mombasa is the one place destined from its advantage of position to grow to high importance. It is the terminus of the railway from Uganda, and is the portal for the trade of that colony, British East Africa, and the northern part of German East Africa.

But the greatest development will be seen in the Congo River ports, and Boma is the gateway through which all the traffic of the Congo River will find its exit and entrance. The Congo with all its network of navigable tributaries will send its exports and draw its imports through the Congo mouth, and thus the

traffic of an immense area almost eighteen times as large as England will extrude through this single channel. In South Africa the absence of river facilities makes it possible for several ports to compete for a traffic that must be sent inland by railway, but where there is a great waterway like the Congo there can be no dispute. Natural conditions are too strong for any artifices of man.

One cannot visit the various colonies of Africa without being driven to compare the colonial policies of the different tutelary powers. Without question, the British are born colonial administrators. Their system or lack of system is the admiration of every other nation; yet, strange to say, no other nation follows their footsteps in the matter of colonial administration. British policy says to all who care to come within its jurisdiction, "Keep the peace and do what you like." Here is an individual freedom that is sadly lacking in the territories governed by other nations. I have known German and other foreigners settled in British Africa who had first settled in German Africa and other parts of the continent. They had found themselves so hampered by the regulations and militarism of the German and other administrations that they had quit the colonies of their own countries for the less codified life under the British administration, and I never yet found one of them regret the change. This is the finest testi-

mony to the success of British colonial policy, the contentment with which foreigners settle down under it. Its result is assimilation, the second generation is British in sentiment though not by descent. The Anglo-Saxon race increases by assimilation more than any other; the others increase almost exclusively by natural increase. I noticed recently a public announcement inviting farmers to settle in Algeria and offering favourable terms for land, but one of the conditions was that the applicants must be French-born French subjects. The folly of it! France with its stationary or declining population cannot afford to take such a view of its colonial policy, and the fact that it does so retards the rapid settlement of its colonies. In a British colony there is no discrimination against any white settler who offers himself. There are equal facilities and privileges for all.

In German and Belgian Africa there is far too much militarism, too much policing; hence they mark time and see British colonies go ahead at a rate that they may envy but cannot achieve. Capitalists as well as settlers fight shy of regulation-ridden states, and such states stand in the light of their own advantage. They have more officials than settlers, and always will have until their policies are revised according to the principles of British policy. After these years there are only three thousand white men, half of them officials, in the great Congo Free State. It is

A PIROGUE

On the Aruwimi River (North-Eastern Congo)

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BELGIAN CONGO

Tusks brought by the natives of Stanleyville, near the Stanley Falls

a moderate estimate that claims that, had the colony been administered according to British ideas, there would have been ten times as many. I believe that the number would have been nearer a hundred times as many.

In a large part of the Congo territory the land is much better suited for white settlement than is the land of South Africa, and the lack of settlement is due to the cause I have stated. The leasehold system of land tenure anywhere in Africa cannot be condemned too severely. Such land tenure is possible only where there is land famine. In a new country it keeps settlers out so long as there are adjacent countries where the freehold of land may be acquired. There is enough of hardships for the pioneer who cuts a home for himself in the bush, without adding to it the knowledge that his work may go for naught, and that his immediate descendants will have to surrender all that they have won by privation and hard toil.

Standing right in the forefront of the great question of African development and colonial policy in Africa is the native problem. No matter whether the interest involved be that of the missionary or trader, the agriculturist or mining prospector, the official or traveller, it is affected by the native question. Upon the settlement or attempted settlement of the native problem the progress of Africa will depend. As attempts to solve the problem are wisely guided or

not, so will progress be rapid or slow or even entirely absent.

There are two main attitudes towards the native question. There is, first, the man-and-brother attitude, which is assumed by many missionaries, but not by all of them. I have heard it referred to as the Exeter Hall attitude, and although I repeat the phrase it must not be assumed that I disparage the work and effort of Exeter Hall and the party associated with that excellent but now departed institution. But to those who insist, with the dogmatism of Puritan intolerance, upon the man-and-brother theory of the negro and white man, I would suggest that they pause a minute in their insistence and consider matters from the point of view of practice, not from that of exalted theory. The man-and-brother advocates have very seldom indeed had any close connection with native races, yet from their distance of six thousand miles they think that they are better qualified to judge matters than are their cousins, to whom the native problem is a pressing practical one every day in the year.

The home politician and the colonial administrator will always, I suppose, have opposite views regarding the legitimate white attitude towards the black. Carry the home politician to the field of actual contact with the black for a few months and he becomes a convert to the colonial view, as firm in his

new-found conviction as he was strong in his former opinion. High politics recently offered a conspicuous example of the divergence of home and colonial views regarding the proper policy to be pursued towards the black races. The colonial statesmen who framed the new constitution of Federated South Africa insisted to the point of rupture upon the non-enfranchisement of the native population. British statesmen had to yield the point amid the loud protests of the man-and-brother party, but to have insisted would have kept back the political progress of British South Africa for who knows how many years. The position taken up by General Botha and his friends was the only possible one if the great sub-continent is to have its proper political and economic advance.

There is no race question between white and white. It will not be a bone of political or social contention in any part of Africa. The hatchet was buried after the Boer War, and if anyone wishes to resurrect it he would have difficulty in finding it. But the race question between black and white is fixed. Assimilation or equality in the fields of political and social life is impossible. White dominance has its root in the eternal order of things, and centuries of light must throw the rays of education, discipline, and habits of industry into the dwarfed intellect and moral being of the negro before he is fit for that highest right of manhood—a voice in the govern-

ment of himself and his fellows, both black and white. Is it disputed that the native at present stands on the low platform suggested? Look at Liberia, that black republic founded under the auspices and with the money of the man-and-brotherhood section of the United States. What is Liberia to-day? Politically and industrially she is a miserable failure. The black community established in West Africa as the republic of Liberia had all the advantages that could well be bestowed upon it—a country of abundant fertility and natural resources, freedom from any white control, and sympathy and encouragement, moral and financial, of well-wishers in all parts of the world. And now, after almost ninety years of existence, what is the republic like? Worse than it was at the beginning! The descendants of the first settlers are too lazy to give the generous soil the little tillage necessary to cause it to yield them bounty, there is no semblance of purity in political life, intellectual stagnation prevails, and a richly dowered territory lies unexploited and unappreciated by its wardens. Look at the other black republics, Haiti and San Domingo, and the conditions are the same. Without any external incentive to work the negro simply vegetates—maintains an existence without economic value to the community. He is devoid of the incentives that spur the white man to effort—ambition or even the desire for creature comforts

above the barest minimum, that are within his reach even without work. What is the life of the negro on his African plateau? His wives do what toil is necessary for the provisioning of the huts that constitute the domestic kingdom. The principal function of the man seems to be that he is a breeding machine, who wishes for many daughters that he may sell them for so many cattle when they approach maturity. His few wants are achieved by such an existence. Is it tenable that the so-called rights of such a manhood should be respected and left undisturbed? Can a man, can a race stand right athwart the path of development of a continent and be allowed to vegetate on a land whose resources he does nothing to exploit? The answer of the man-and-brother party is in effect "yes"; but politicians in touch with the subject, commercial and practical men who know the facts at first hand, officials whose business it has been to administer such territories, protest a fervent negative. The plain issue is, "shall the native be allowed to remain in his idleness and laziness, or will some form of compulsion, mild or otherwise, be employed to raise him into a unit of economic value to the world?"

To the question propounded my emphatic reply is that the native must be induced or made to work by some means or other. To the white man has been given wardship over the black races. He is in a literal sense his brother's keeper, and fidelity to his trust

calls for measures that will bring a fuller and wider life to the black man himself as well as material benefits to the white man. The liberty of the individual is a sacred doctrine up to a point, but beyond that point it becomes the licence of an individual. Work, service to the community, is the only *apologia pro sua vita* that any man can offer, and if he cannot show voluntary service to the community he ought to be made to give a forced service.

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